ES/GE 310 GLOBAL RISKS, REGIONAL VULNERABILITIES AND SUSTAINABLE DEVELOPMENT PATHWAYS IN THE MEDITERRANEAN REGION

IES Abroad Nice

DESCRIPTION:

The Mediterranean region, one of the oldest trading regions in the world has been described as an area of mutual economic, social and cultural exchanges. Yet this ancient trading ground is now threatened by unsustainable human pressures on fragile linked social and ecological systems, as well as growing distrust between the less developed and more developed parts of the region.

This course will analyze regional vulnerabilities in a context of global risks and will explore mitigation and adaptation strategies at multiple scales, through case studies. The role of international and regional organizations in adaptation, resilience building risks mitigation and disasters preparedness will also be examined.

CREDITS: 3 credits

CONTACT HOURS: 45 hours

LANGUAGE OF INSTRUCTION: English

PREREQUISITES: None

METHOD OF PRESENTATION:

Lectures

The major part of a class session will consist of a lecture by the instructor; it aims at giving a core knowledge of sustainable development and a general approach of the Mediterranean context and its related issues.

Class discussion

About half of each class will consist of discussions of key themes. The students will be provided with the texts to read for each class mainly on online information resources, together with a list of reading questions designed to focus their attention on key points and concepts in the texts. These will form the basis of the class discussions. The theoretical readings will be supplemented with archival sources (such as maps, texts, iconography), distributed through Moodle or in class, which will serve to illustrate the issues presented in the lectures and the readings. Additional reading may be assigned during the course of the semester.

Field studies

One field study will be organized, in addition to the Marseille Study trip, in order to illustrate the different challenges of sustainable development in the Provence Alpes-Maritimes region: Sospel, on the Salt road, illustrating vulnerabilities, environmental risks, natural disasters and adaption techniques in an medieval village located at 450m altitude in the olive trees range, 15 km from the coast.

Video viewings

There will be some video clips viewings throughout the course. They will serve as material for discussion of the theoretical concepts covered in the course.

REQUIRED WORK AND FORM OF ASSESSMENT:

- Course participation: 25%
- Midterm Exam: 20%
- Final Exam: 30 %
- Final Essay: 25%

Course Participation

Students will be expected to come to class prepared and to participate actively in class.

Midterm Exam
This will use different formats to assess students' progress towards the learning outcomes in the first half of the course. The question formats will include essay questions, multiple choice questions, short answer questions and justified True/False questions.

Final Exam
This will use different formats to assess students' progress towards the learning outcomes of the entire course. The question formats will include essay questions, multiple choice questions, short answer questions and justified True/False questions.

Research Paper
Students will write the first draft of a research paper on one of the suggested topics on the Mediterranean vulnerabilities using required and recommended readings (document of 15 pages, double-spaced; standard margins and fonts). Students will first submit the topic by week 7 and a draft (week 10). After receiving comments from the instructor, the student will then work on the final version of his research paper, (submitted on week 14). This paper will be evaluated by taking into account the analytical, organizational and formalistic quality of the work as well as the extent to which the student has effectively incorporated the instructor's' comments on the draft.

LEARNING OUTCOMES:
By the end of the course students will be able to:

- Understand the key concepts of sustainable development
- Have a practical approach of the management of resources
- Assess the importance of environmental issues in the economic development policy of a country
- Analyze the Mediterranean basin as a genuine laboratory for sustainable development

ATTENDANCE POLICY:
Attendance is mandatory for all IES Abroad classes, including field studies. Any exams, tests, presentations, or other work missed due to student absences can only be rescheduled in cases of documented medical or family emergencies. If a student misses more than two classes in any course half a letter grade will be deducted from the final grade for every additional absence. Seven absences in any course will result in a failing grade.

CONTENT:

Lesson	Content	Case study	Assignments
Lesson 1	**Introduction > The cascading nature of risks in the Anthropocene in the Mediterranean context** Definition of risks, catastrophic risks, disasters, risk prevention, mitigation, preparedness The interlinked nature of risks. Natural disasters vs Man-made disasters. Regional overview of the Mediterranean region	→ *Case study: Defining the PACA region with three anthropogenic linked social and ecological systems: the coastal region; the agricultural region; the high country.*	Assigned Reading 1: Walker et al.. (2012). Drivers, "slow" variables, "fast" variables, shocks, and resilience. *Ecology and Society* 17(3): 30. Assigned Reading 2: Scoullos & Ferragina. (2010). "Environmental and Sustainable Development in the Mediterranean". Papers for Barcelona 2010. **Only pp. 13-20**.
Lesson 2	**Geography is Destiny and climate change is part of it.**	→ Case study: *The Nile Delta*	Assigned Reading 1: Schwarz, B. (December, 2008). "Geography is Destiny"

	Some of the greatest and oldest civilizations in the world have flourished in around deltas, rivers basins, and coastlines. Yet these are today some of the highest risks hotspots. *This lecture will present the vulnerabilities resulting from rapid population growth, the resulting profound spatial and land use transformation during the last seventy years, in a context of climate change.*	*Dam(n) ing the Nile?*	http://www.theatlantic.com/magazine/archive/2008/12/geography-is-destiny/307163/ Assigned Reading 2: Magnan et al. (2009). The future of the Mediterranean: From impacts of climate change to adaptation issues. IDDRI. Only **PP12-26**. Assigned Reading 3: Nile Basin Initiative. (2012).Chapter 9: Summary in *State of the River Nile Basin 2012*.
Lesson 3	**Population dynamics; Implications for the economy and the environment** This class will illustrate how, in spite of very different demographic trends in the Northern and Southern Mediterranean countries, both sub regions face common challenges such as unemployment, and the increasing burden of an aging population. If not addressed these challenges present serious risks.	→ *Case study: Investing in women's education for sustainability*	Assigned Reading 1: Kimberly, A. (2013). Globalization, Women's Empowerment and Sustainable Growth: Development Theory with a Vagina. *Global Societies Journal,* pp. 115-130. Assigned Reading 2: Quagliariello, R. & Ciannamea, C.. (2016). Building resilience of Mediterranean rural communities through the empowerment of women. *CIHEAM, Bari Watch Letter n°36*.
Lesson 4	Hotspots of high vulnerabilities Sea, mountain regions, arid zones, deltas: The impact of unwise land use decisions is being felt now throughout the region and is being exacerbated by climate change.	**FIELD STUDY ONE** *Sospel on the salt Road*	Assigned Reading 1: Zdruli, P. (2012). Land Resources of the Mediterranean: Status, Pressures, Trends and Impacts on Future Regional Development. *Land Degrad. Develop. 2012*.
Lesson 5	**Improving integrated water resource management and transboundary river management** In the Mediterranean region, water is a scarce and fragile resource that is unequally distributed in time and space, and climate change is expected to lead	→ *Case Study*: *Tunisia: managing water for multiple users in context of growing water scarcity and climate unpredictability*	Assigned Reading 1: Roson, R. & Sartori, M. (2010). Water Scarcity and Virtual Water Trade in the Mediterranean. **pp. 1-13.** Assigned Reading 2:

	to more irregular and lower volumes of rainfall. This class will discuss pressing challenges of water management such as how to manage scarce water resources sustainably; how to secure access to safe drinking water for population groups who do not yet have it; and how to promote transboundary collaboration, in shared water basins.		Lazarova et al. (2001). Role of water reuse for enhancing integrated water management in Europe and Mediterranean countries. *Water Science &*
Lesson 6	**Ensuring access to and sustainable management of energy in a context of shift to renewable energy sources.** This class will discuss energy consumption trends and the high dependent on fossil fuels, with pricing and tax structures that are not conducive to energy saving. In a context of climate change a rise in greenhouse gas emissions coupled with increased energy dependency is not sustainable. Efforts to move towards renewable energies will be presented.	→ *Case Study: DESERTEC* www.**desertec**.org/	Assigned Reading 1: Ben Jannet Allal, H. (2011). Energy perspectives in the Mediterranean. Challenges and stakes for 2030 in *Tomorrow, the Mediterranean*, Cécile Jolly (coordinator), **pp.109-119.** Assigned Reading 2: Stegen et al. (2012). Terrorists versus the Sun: Desertec in North Africa as a case study for assessing risks to energy infrastructure. *Risk Management, Vol. 14, No. 1, Risk, Sustainability and the Environment (Part 2)*, pp. 3-26.
Lesson 7	MID TERM EXAM		

Lesson 8	**Ancient cities and sprawling urban growth: How can the Mediterranean region protect and nurture its rich urban legacy while meeting the needs of a growing urban citizenry?** This lecture will discuss population dynamics and urban growth in a region where the urban population is expected to stabilize in Northern Mediterranean urban regions and grow in Southern and Eastern Mediterranean cities. Since most of this growth will occur in coastal zones, challenges of unsustainable human pressures aggravated by climate change must be dealt with through integrated coastal zones management and adaptive governance. Examples of integration of SD principles in spatial planning of the exceptional cultural, historical and landscape assets of Mediterranean cities will be highlighted as well as policies to reduce air pollution, waste generation and disaster vulnerability.	**FIELD STUDY> 2** → *Marseille*	Assigned Reading 1: Chaline, C. (2001). Urbanisation and town management: Assessment and Perspectives for sustainable urban development. UNEP, Mediterranean Commission on Sustainable Development, **pp.1-38** Assigned Reading 2: Martin Han, S. & Meggi, H. (2009) Sustainable Development of Megacities of Tomorrow: Green infrastructures for Casablanca, Morocco. *Urban Agriculture 22*, pp. 27-29.
Lesson 9	**Feeding 525 million by 2025 and sustaining livelihoods and social and ecological systems in arid lands: The Food, Energy Land/Water nexus in the Mediterranean region** In the context of growing food insecurity, water scarcity, land losses and marginalization of rural zones, this class will discuss the need to adopt integrated policies for agricultural systems including water that conserve water quantity and quality, look at the sustainability of "virtual water" and the options for water desalination in the region.	→ *Case Study*: *Food security and conflicts in Lebanon and Egyp*t	Assigned Reading 1: Marty et al. (2016). Tensions and potential crisis in the MENA region's food-system in 2050. In *Watch Letter no 36: Crisis and Resilience in the Mediterranean*, CIHEAM. Assigned Reading 2: Hamade, K. (2016). Agriculture as a Key to the Resilience of Lebanon Rural Areas to the Effect of the Syrian Crisis. In *Watch Letter no 36: Crisis and Resilience in the Mediterranean*, CIHEAM. *Technology 43(10):*25-33.

Lesson 10	**Meeting sustainable development challenges in the Mediterranean region: a new governance framework** This class will discuss emerging the governance framework for sustainable development in the Mediterranean region and its evolution in a context of rapid context of population growth, climate change and social tensions. The revised Mediterranean Strategy for Sustainable Development (MSSD),which promotes "A prosperous and peaceful Mediterranean region in which people enjoy a high quality of life and where sustainable development takes place within the carrying capacity of healthy ecosystems", will be discussed.	→ *Case Study*: *The effectiveness of the existing governance framework in dealing with wastewater pollution*	Assigned Reading 1: United Nations Environment Programme, Mediterranean Action Plan. Chapter 3: Implementing the Strategy, Associating all the Partners and Monitoring Progress. In *Mediterranean Strategy for Sustainable Development: Framework for Environmental Sustainability and Shared Prosperity*, **pp. 24-29.** Assigned Reading 2: Massoud et al. (2003). Qualitative assessment of the effectiveness of the Mediterranean action plan: wastewater management in the Mediterranean region. *Ocean & Coastal Management 46*, pp. 875-899.
Lesson 11	**Sustainable Tourism** This class will discuss the ecological footprint of tourism in the region and see how recent efforts to promote eco-tourism, agritourism and forms of tourism that are more socially equitable have succeeded.	→ **Case study:** French Riviera: economic, social and environmental vulnerabilities.	Assigned Reading 1: Billé et al. (2013). Tourism and Climate Change in the Mediterranean 1: Challenges and Prospects. **Read Introduction and Conclusion.**
Lesson 12	**Policies and tools to achieve sustainable management of the sea and coastal zones** Coastal zones in the Mediterranean region are coveted, valuable yet fragile resources. This class will highlight some of the most pressing challenges on resources, social and ecological systems and livelihoods such as tourism, construction, land-based pollution, waste disposal and poor watershed management. We will also discuss pollution from ships including illegal oil discharges and	→ *Case study: Towards a "Blue Economy" for the Mediterranean.*	Assigned Reading 1: The 1976 Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention). Assigned Reading 2: Blue Economy Project. (2016). Blue economy for a healthy Mediterranean- Measuring, Monitoring and Promoting an environmentally sustainable economy in the Mediterranean region. **pp. 4-26.**

	ballast water, as well as prevention policies in place within the framework of Protocols and action plans adopted under the Barcelona Convention.		
Lesson 13	**Transition towards a green economy; including sustainable consumption and production** This class will highlight how the environment-economy nexus is key to meeting the challenges facing Mediterranean countries. The lecture will demonstrate how policies, programs and partnerships mainstreaming the environment in economic policies and promoting a green growth agenda at the national, regional levels and local level can lead to job creation, greater equity and sustainable management of natural resources.	→ *Case Study: Regional planning, local economies and food systems and green growth in Italy*	Assigned Reading 1: The World Bank. *Toward Green Growth in Mediterranean Countries: Implementing Policies to Enhance the Productivity of Natural Assets.* 2012 MED Report. **Read "Overview".**
Lesson 14	**Migration a risk or an opportunity?** This lecture will discuss how migration represents both an opportunity and a challenge in the Mediterranean region. While well-managed migration may foster progress and welfare in origin- as well as destination countries, its mismanagement may put social cohesion, security and national sovereignty at risk. Sound policy-making on migration and related matters must be based on knowledge, but the construction of knowledge must in turn address policy priorities.	→ *Case Study: Mare Nostrum?*	**Assigned Reading 1**:De Bruycker et al. (2013). Migrants smuggled by sea to the EU: facts, laws and policy options. Migration Policy Centre Research Report 2013/0+. **Assigned Reading 2**: Fargues, P. & Salinari, G. (2011). Migratory flows and demographic transition. Long term evolution and future scenarios. In *Tomorrow, the Mediterranean*, Cécile Jolly (coordinator), **pp. 69-109**. UNHCR Statistics: http://www.unhcr.org/figures-at-a-glance.html **FINAL RESEARCH PAPER**
Lesson 15	**FINAL EXAM**		

REQUIRED READINGS:

- Walker et al.. (2012). Drivers, "slow" variables, "fast" variables, shocks, and resilience. Ecology and Society 17(3): 30.

- Scoullos & Ferragina. (2010). “Environmental and Sustainable Development in the Mediterranean”. Papers for Barcelona 2010. Only pp. 13-20.
- Schwarz, B. (December, 2008). “Geography is Destiny”. The Atlantic. Retrieved from: http://www.theatlantic.com/magazine/archive/2008/12/geography-is-destiny/307163/
- Magnan et al. (2009). The future of the Mediterranean: From impacts of climate change to adaptation issues. IDDRI. Only PP12-26.
- Nile Basin Initiative. (2012). Chapter 9: Summary in State of the River Nile Basin 2012.
- Kimberly, A. (2013). Globalization, Women's Empowerment and Sustainable Growth: Development Theory with a Vagina. Global Societies Journal, pp. 115-130.
- Quagliariello, R. & Ciannamea, C.. (2016). Building resilience of Mediterranean rural communities through the empowerment of women. CIHEAM, Bari Watch Letter n°36.
- Zdruli, P. (2012). Land Resources of the Mediterranean: Status, Pressures, Trends and Impacts on Future Regional Development. Land Degrad. Develop. 2012.
- Zdruli, P. (2008). Land degradation in the Mediterranean: Findings of the EU-funded MEDCOASTLAND Project. (CIHEAM)—Mediterranean Agronomic Institute of Bari. pp.1-12.
- Roson, R. & Sartori, M. (2010). Water Scarcity and Virtual Water Trade in the Mediterranean. pp. 1-13.
- Lazarova et al. (2001). Role of water reuse for enhancing integrated water management in Europe and Mediterranean countries. Water Science & Technology 43(10):25-33.
- Ben Jannet Allal, H. (2011). Energy perspectives in the Mediterranean. Challenges and stakes for 2030 in Tomorrow, the Mediterranean, Cécile Jolly (coordinator), pp.109-119.
- Stegen et al. (2012). Terrorists versus the Sun: Desertec in North Africa as a case study for assessing risks to energy infrastructure. Risk Management, Vol. 14, No. 1, Risk, Sustainability and the Environment (Part 2), pp. 3-26.
- Billé et al. (2013). Tourism and Climate Change in the Mediterranean 1: Challenges and Prospects. Read Introduction and Conclusion.
- Marty et al. (2016). Tensions and potential crisis in the MENA region’s food-system in 2050. In Watch Letter no 36: Crisis and Resilience in the Mediterranean, CIHEAM.
- Hamade, K. (2016). Agriculture as a Key to the Resilience of Lebanon Rural Areas to the Effect of the Syrian Crisis. In Watch Letter no 36: Crisis and Resilience in the Mediterranean, CIHEAM.
- United Nations Environment Programme, Mediterranean Action Plan. Chapter 3: Implementing the Strategy, Associating all the Partners and Monitoring Progress. In Mediterranean Strategy for Sustainable Development: Framework for Environmental Sustainability and Shared Prosperity, pp. 24-29.
- Massoud et al. (2003). Qualitative assessment of the effectiveness of the Mediterranean action plan: wastewater management in the Mediterranean region. Ocean & Coastal Management 46, pp. 875-899.
- Chaline, C. (2001). Urbanisation and town management: Assessment and Perspectives for sustainable urban development. UNEP, Mediterranean Commission on Sustainable Development, pp.1-38
- Martin Han, S. & Meggi, H. (2009) Sustainable Development of Megacities of Tomorrow: Green infrastructures for Casablanca, Morocco. Urban Agriculture 22, pp. 27-29.
- The 1976 Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention).
- Blue Economy Project. (2016). Blue economy for a healthy Mediterranean- Measuring, Monitoring and Promoting an environmentally sustainable economy in the Mediterranean region. pp. 4-26.
- The World Bank. Toward Green Growth in Mediterranean Countries: Implementing Policies to Enhance the Productivity of Natural Assets. 2012 MED Report. Read “Overview”.
- De Bruycker et al. (2013). Migrants smuggled by sea to the EU: facts, laws and policy options. Migration Policy Centre Research Report 2013/0+.
- Fargues, P. & Salinari, G. (2011). Migratory flows and demographic transition. Long term evolution and future scenarios. In Tomorrow, the Mediterranean, Cécile Jolly (coordinator), pp. 69-109.

Online resources

- 2009 NISDR Terminology on Disaster Risk Reduction: http://www.unisdr.org/we/inform/terminology
- UNISDR Disaster Statistics: http://www.unisdr.org/we/inform/disaster-statistics

- NIDI Groenewold, Joop de Beer, Corina Huisman 2012. Population Scenarios for South Mediterranean Countries: 2010-2015 http://www.medpro-foresight.eu/publications-wp3
- Mediterranean Strategy for Sustainable Development A Framework for Environmental Sustainability and Shared Prosperity. www.un.org/esa/sustdev/.../MSSD_latest_eng.pdf
- United Nations Environment Programme Mediterranean Action Plan for the Barcelona Convention: http://www.unepmap.org/index.php?module=content2&catid=001003005
- Perseus, Southern European Clean seas by 2020. http://www.perseus-net.eu/site/content.php
- Plan Bleu, A toolbox for better management of the marine environment. http://en.econostrum.info/A-toolbox-for-better-management-of-the-marine-environment_a350.html#ixzz3Tb4zUD61
- The 1976 Convention for the Protection of the Mediterranean Sea Against Pollution (Barcelona Convention): http://www.unepmap.org/index.php?module=content2&catid=001001004
- DESERTEC Foundation www.desertec.org/
- UNHCR Statistics http://www.unhcr.org/figures-at-a-glance.html

Maps

- Mediterranean Sea I GRID-Arendal Maps & Graphics library http://www.grida.no/graphicslib/tag/mediterranean-sea?p=3
- UNEP 2013. Arab Region Atlas of Our Changing Environment United Nations Environment Programme Hardcover:303 pages ISBN: 978-92-807-3158-3

RECOMMENDED READINGS:

- Assaad, R. and Farazneh R.-F. (2007). Youth in the Middle East and North Africa: Demographic opportunity or challenge? Population Reference Bureau, www.prb.org/pdf07/YouthinMENA.pdf
- Black, R., Kniveton D., Skeldon R., Coppard D., Murata A. and Schmidt K.
- (June 2008). Demographics and climate change: future trends and their policy implications for migration. Working paper T-27. Development Research Centre on Migration, Globalisation and Poverty, Université de Sussex.
- Clionadh R., Jordan L. and Salehyan I. (2005). Assessing the impact of climate change on migration and conflict. The Word Bank.
- Cuberes, D. (2009). Early and late demographic transitions: the role of urbanization. MPRA paper n. 11720. de Haas, H. (2005). Morocco's migration transition: trends, determinants and future scenarios. Global migration perspectives 20:1-38. de Haas, H. (2007). North African migration systems: evolution, transformation and development linkages. Working Paper n°6. International Migration Institute.
- Fargues Ph. (2009) Emerging demographic patterns across the Mediterranean and their implications for migration through 2030, in talent, competitiveness and migration. The Transatlantic Council on Migration. Verlag Bertelsmann Stiftung & Migration Policy Institute. Washington 2009: pp. 129-162.
- Myers, N. (2005). Environmental Refugees: An emergent security issue. 13th Economic Forum. Prague, pp. 23-27.
- Shiva, V.(2002). Water wars. Cambridge, MA: South End Press.
- World Bank (2004).Mena Development report: Unlocking the employment potential in the Middle East and North Africa: Toward a new social contract. Washington DC.
- World Bank (2008).Mena Development Report : The Road not travelled - Education reform in the Middle East and North Africa. Washington DC.
- World Bank, World Development Report 2007. Take advantage of Mena's demographic "window of opportunity", http://siteresources.worldbank.org/INTWDR2007/Resources/1489782115807640354 6/WDR2007RegionalHighlights_MENA_Aug29_draft6.pdf.
- Radwan. S. Rural youth unemployment and coping strategies in the North East and North Africa region, Rome. Ifad. 2007.
- Mediterranean Energy Perspectives (mep). mep 2011 with the OME scenarios. For more information on the model and the mep: www.ome.org.
- Benoit G. Comeau A., (dir.), 2005. A Sustainable Future for the Mediterranean: the Blue Plan's Environment and Development Outlook. London, Earthscan, 2005. 450 p. ISBN 978-1-84407-259-0
- Billé, R. 2008. Adapting to climate change in the Mediterranean: some questions and answers. IDDRI, série "Synthèses", n°1/2008.
- Fermin A., 2009a. EACH-FOR Case-study Report: Spain, available at http://www.each-for.eu/

- Fermin A., 2009b. EACH-FOR Case-study Report: Morocco, available at http://www.each-for.eu/
- Scientific Expert Group on Climate Change (SEG), 2007. Confronting Climate Change: Avoiding the Unmanageable and Managing the Unavoidable [Rosina M. Bierbaum, John P. Holdren, Michael C. MacCracken, Richard H. Moss, and Peter H. Raven (eds.)]. Report prepared for the United Nations Commission on Sustainable Development. Sigma Xi, Research Triangle Park, NC, and the United Nations Foundation, Washington, DC, 144 p.
- Somot S., Sevault F., Déqué M., Crépon M., 2007. 21st century climate change scenario for the Mediterranean.
- Raphaël Billé, Julien Rochette, The Mediterranean ICZM Protocol: paper treaty or wind of change?
- OCEAN & COASTAL MANAGEMENT, 2015. doi:10.1016/j.ocecoaman.2014.12.025

INSTRUCTOR BIOGRAPHY:

Christine Alfsen is now teaching sustainable development at Sciences Po, campus of Menton in the South of France, Le Havre and Paris. She is also building an ecological house and developing ecosystems services such as biodiversiy, pollination services, food and water storage on the land.

Previously she worked for the United Nations for 32 years. Her last assignment was Senior Advisor on the Global Sustainability Panel in the Office of the UN Secretary General. Previously she was the Director, a.i. of the UNESCO (United Nations Educational Scientific and Cultural Organization) Office in New York. She also directed a joint program between UNESCO and Columbia University on biodiversity and society. The focus of her work in the last ten years has been on governance of urban areas and ecosystems functions in human dominated landscapes. Ms. Alfsen was born in France and received her undergraduate training in Political Sciences at the Institut d'Etudes Politiques de Paris (Sciences Po), followed by graduate degrees Public Law and Development Economics. She also has degrees in Russian and Romanian languages and civilizations. She joined the UN system in 1979. Her career included 18 years in Southeast Asia, with the Economic and Social Commission for Asia and the Pacific in Thailand where she served as a regional adviser on the Law of the Sea, five years in Cambodia where she was part of the Peace Keeping, United Nations Transitional Authority in Cambodia (UNTAC) in charge of the Natural Resources Sector and then from 1995 to 1997 at UNESCO Phnom Penh where she managed the Environment Unit. Christine Alfsen has published in peer reviewed journals on urban ecosystems and their connections to societies. She speaks five languages and has lectured extensively in North America.