## **Global Sustainable Development**

INTR 205.1 University of Rochester

Fall 2020 Thursdays 2:00-3:45 pm (class time shortened due to Zoom)

(Online course, supplemented by in-person, small group discussion)

Professor: Milena Novy-Marx Email: mnovymarx@gmail.com

Office Hours: Immediately following class or by appointment Office Location: Harkness 330 or by Zoom

## **Course Description**

With world population of nearly 8 billion and global GDP of \$142 trillion, human impacts on the environment have already reached dangerous levels. By 2050, world population could reach 9 billion and global GDP \$250 trillion. Despite unprecedented growth in countries such as China and India, over 700 million people still live in extreme poverty—concentrated especially in South and Central Asia and Africa. The central challenge for humanity in the 21<sup>st</sup> century is the triple endeavor of ending extreme poverty, improving social inclusion, and achieving sustainability for the planet. Any effort to address these three complex, interlinked challenges must be interdisciplinary. Policies at the local, national and global level will need to draw on the best of our knowledge and innovation across sectors such as energy, biodiversity and conservation, health, sustainable business practices, food and nutritional security, social service delivery, and good governance. Interventions and policies in these sectors must be gender sensitive, address racial inequalities and discrimination, and be in keeping with international standards of human rights. They must involve governments, the private sector, and civil society. In September 2015, the world adopted the Sustainable Development Goals (SDGs) for 2015 to 2030 at the UN General Assembly while the historic Paris Climate accord was also reached under the UN Framework Convention for Climate Change.

The 13 weeks of the course include a significant practical element – students will work in small groups with a partner organization (a business or non-profit) focused on some aspect of sustainable development to complete a project that is of importance to the organization. Projects will be identified in advance by the professor through collaborative arrangements with the organizations. Course requirements include weekly readings, a weekly writing assignment, discussion, two quizzes, and the final group project.

CREDIT HOURS: 4 credit hours. This course follows the College credit hour policy for 4-credit courses. This course meets once weekly for 95 minutes per week. The course also includes independent out of class assignments and group work for at least 1 hour per week, including using assigned readings and other class materials (as noted in the syllabus assignments) as well as occasional in person or online small group meetings with the professor. These activities include preparation to lead or participate in group case discussion, work on group case

discussion questions, assignments, and team-based group project presentation preparation. Students are expected to spend at least 8 hours per week on assigned reading and assignments as discussed below. Length of reading assignments will vary given the complexity of the material assigned.

ACADEMIC SUPPORT SERVICES: Students are encouraged to utilize academic support services: the Writing Speaking and Argument Program, https://writing.rochester.edu; Center for Excellence in Teaching and Learning (CETL), <a href="www.rochester.edu/college/cetl/">www.rochester.edu/college/cetl/</a>

ACADEMIC HONESTY: All assignments and activities associated with this course must be performed in accordance with the University of Rochester's Academic Honesty Policy. More information is available at: www.rochester.edu/college/honesty

DISABILITY RESOURCES: The University of Rochester respects and welcomes students of all backgrounds and abilities. In the event you encounter any barrier(s) to full participation in this course due to the impact of disability, please contact the Office of Disability Resources. The access coordinators in the Office of Disability Resources can meet with you to discuss the barriers you are experiencing and explain the eligibility process for establishing academic accommodations. You can reach the Office of Disability Resources at: <a href="http://disability@rochester.edu">http://disability@rochester.edu</a>; (585) 276-5075; Taylor Hall.

https://www.rochester.edu/college/disability/faculty/syllabus-statements.html

## **Learning Objectives**

The course learning objectives focus on substantive knowledge, critical thinking, practical project work, and project management and completion skills.

By the end of the semester, students should:

- Be familiar with thematic and conceptual debates on sustainable development
- Understand basic issues, trends, and concepts in the field of international economic and sustainable development
- Be familiar with current and emerging global issues related to the Sustainable Development Goals in fields such as energy and climate, agriculture, global health and education
- Have a greater understanding of some of the strategies and examples of ways in which government, the private sector and citizens can contribute to a sustainable society and economy
- Have a greater awareness of how and why sustainable development is important and how we as a society and global community can work to attain it.

- Learn and practice professional skills of time management, project management, professional communication by email, phone and Zoom/video conference with an employer
- Engage in self-reflection regarding the course, your experience and what you have learned through working with your partner organization/company.

## Aug 27 Introductory Session: Sustainable Development Goals (SDGs) (Week 1)

(Note: The first lecture and class will be online and asynchronous. Complete the readings and then watch the lecture. Then, complete the weekly writing assignment below. Please submit it to me electronically at <a href="mailto:mnovymarx@gmail.com">mnovymarx@gmail.com</a>)

### **Readings**

<u>Transforming Our World: The 2030 Agenda for Sustainable Development</u>, Finalized text for adoption by the UN General Assembly in September 2015. Read pages 3-28; **25 pages**.

"The Sustainable Development Goals Report 2020," United Nations, 2020, Pages 1-26 only. 26 pages

Current State of the World Economy and Society, Economist Jeffrey Sachs, Columbia University. Watch Video (11 minutes), CNBC, August 17, 2020, Video.

## **Module 1 Learning Objectives**

- 1. Know the definition of sustainable development and its three pillars.
- 2. Understand what the Sustainable Development Goals (SDGs) are and how they were created (by whom, when, why, where, and through what process).
- 3. Understand how the SDGs evolved from the Millennium Development Goals (MDGs), and how they aim to address some of the shortcomings of the MDGs.
- 4. Be familiar with how the SDGs are measured, in particular through the targets and indicators under each SDG.
- 5. Be familiar with at least two of the SDGs---why they are important, the targets for reaching those SDGs and how they relate to the other SDGs (for example, will meeting those SDGs help us to attain any of the other SDGs)?
- 6. Understand how the SDGs are operationalized. How do countries take these goals on and try to achieve them? Through what processes in general?

- 7. Is achievement of the SDGs a legally binding obligation? How is the commitment to countries meeting the SDGs enforced?
- 8. How has the coronavirus pandemic impacted our progress toward meeting the SDGs globally? What are some of the challenges it has posed in specific areas/SDGs? To the global economy and to individual wellbeing as a whole?

#### Weekly Assignment 1

Answer the following questions by writing a short paragraph for each (approximately 4 to 6 sentences). Be sure to answer each part of the question.

- 1. What are the Sustainable Development Goals (SDGs) and how were they created (by whom, when, why, where, and through what process)?
- 2. The *Transforming Our World* document is official UN text resulting from very lengthy negotiations with all members of the UN Generally Assembly 193 nations as well as the broadest consultative process in history. It was then adopted by all the nations of the General Assembly, representing nearly every nation in the world. How is this document different than a research report or academic article? Where do you see evidence in the document of the framers' intentions to address/balance the needs and priorities of the world's wealthiest and poorest nations? Please give direct examples from the text. What are two of the principles and aspirations it refers to, before laying out the SDGs?
- 3. Choose 1 SDG of interest to you. Why is it important? What are some of the targets for reaching that SDG (give 2 examples of targets for each) and what is an example of an indicator under each target? Go to SDG Tracker to research this. Is there is a target that is missing under this SDG in your opinion?
- 4. The SDGs are interdependent and indivisible. <u>Explain</u> how one of the SDGs impacts other SDGs and vice versa (if relevant)—don't just say which one impacts another one, but describe <u>how</u>. For example, how will meeting one SDG of your choice help us to attain some of the other SDGs? Use your knowledge, imagination, common sense, and if necessary, research.
- 5. Turning to the topic of tracking progress and enforcing the SDGs, look at one of the <u>Voluntary National Reviews</u> reports submitted to the UN by a country of your choice (scroll down on the website to see the individual country reports). What is one SDG/area where that country has made progress, and what is the progress cited? What is one area where that country has faced challenges? Describe.
- 6. What are three of the main points made by economist Jeffrey Sachs in the video assigned? (1 sentence each).

#### PART I: The ECONOMICS OF SUSTAINABLE DEVELOPMENT

## Sept 3 **Economic Development: Determinants and Measures** (Week 2)

Robert J. Barro, "<u>Determinants of Economic Growth: A Cross-Country Empirical Perspective,</u>" NBER Working Paper 5698, 1996. **Pages 1-53 only** 

## Collaborative Projects – Week 1

- We will discuss how we will go about working on the collaborative projects in this course.
- We will introduce the organizations/companies with which you will be working this semester.
- We will briefly define the projects to be completed with each partner organization/company.

## Article on inequality (TBD)

Critique of economic growth reducing poverty (TBD)

Global Profile of Extreme Poverty, "Background Paper for the High Level Panel of Eminent Persons on the Post-2015 Development Agenda," UN Sustainable Development Solutions Network, 2012. **8 pages** 

#### **Learning Objectives**

- 1. Understand the definition of economic growth.
- 2. Understand thinking in the field of economics, as described by Barro, regarding the main determinants of economic growth. What contributes to growth? What detracts from it?
- 3. Be familiar with some of the critiques of Barro's model/theory in terms of whether economic growth contributes to poverty reduction.
- 4. Understand if economic growth necessarily leads to reductions in inequality in a society/economy. Analyze the relationship between income inequality and poverty reduction. For example, do highly unequal societies have more poverty? Is it harder to reduce poverty in highly unequal societies? Does inequality help, hurt, or neither?
- 5. Be aware of some of the policy levers needed to ensure that economic growth helps to reduce poverty.

- 6. Understand the definition of extreme poverty, where in the world it is most prevalent, and how the incidence of extreme poverty is changing (is it increasing, decreasing, or staying the same, and measured how? In total numbers of people or % of population, or other?).
- 7. Know some of the causes of/factors contributing to extreme poverty according to the Global Profile article.

## Weekly Assignment 2

Answer the following questions by writing a short paragraph for each (approximately 4 to 6 sentences). Be sure to answer each part of the question.

- 1. Describe three determinants of economic growth according to Barro, and explain why each of them is important to economic growth according to his model.
- 2. Under what circumstances can economic growth contribute to poverty reduction? What types of policies might be needed to ensure that economic growth reduces poverty?
- 3. Is economic growth compatible with sustainable development? Can we have both? If not, explain why not. If so, what is necessary to ensure that economic growth is sustainable? Think about the three pillars of sustainable development.
- 4. What is extreme poverty? What are some of the factors that contribute to it? How will

## Collaborative Projects - Week 2

- Students will express their preferences for which organizations/companies they would like to work with.
- We will assign students to small groups with a particular organization/company.
- Students should identify one person in the group who will be the contact point for the group with your partner organization—this person will be in charge of communications by email with the partner organization.
- The student contact point should reach out to the partner organization to schedule a first meeting for the group with your partner organization.

addressing extreme poverty contribute to sustainable development? Be specific.

## Sept 10 New Measures of Wellbeing and Development (Week 3)

Discuss Pro-Growth policies; FAO article.

"Report by the Commission on the Measurement of Economic Performance and Social Progress," Joseph E. Stiglitz, Amartya Sen, Jean-Paul Fitoussi, Executive Summary, pages 1-12, 2009. **12 Pages** 

Measuring Well-Being and Progress, OECD, November 2017, 12 Pages

<u>World Happiness Report 2020</u>, Eds. John Helliwell, Richard Layard, and Jeffrey Sachs, Overview and Chapter on Sustainable Development, pp. <u>1-12 and 113-128 only</u> **27 pages**.

## **Learning Objectives**

- 1. Understand the rationale for developing alternative measures of economic progress.
- 2. Be aware of the extent to which countries have shifted toward using these new measures.
- 3. What are some of the barriers/drawbacks as well as benefits to using these new measures?
- 4. Understand some of the main components of alternative measures of economic progress.
- 5. Be familiar with the rationale for using happiness as a measure of well-being, and understand how happiness is measured within a country and compared across countries.

#### Weekly Assignment 3

Answer the following questions by writing a short paragraph for each (approximately 4 to 6 sentences). Be sure to answer each part of the question.

- 1. What are some of the drawbacks to using GDP and the growth rate of GDP (economic growth) as the sole measure of a country's economic health and wellbeing?
- 2. What does the Commission on Measurement of Economic Performance argue for? What measure of economic performance do you feel best helps us to measure progress toward sustainable development?
- 3. Try the CompareYourIncome survey on p. 10 of the OECD reading by going to the <a href="https://www.compareyourincome.org">www.compareyourincome.org</a>. Did anything surprise you? If not, why?
- 4. What factors are most associated with the level of a country's happiness rating, according to authors of the *World Happiness Report*? Does measuring happiness help us to measure progress toward sustainable development? Why or why not?
- 5. What do the authors of the *World Happiness Report* chapter on Sustainable Development argue are the links between sustainable development and human well being? What are two of their main recommendations?

## Sept 17 New Models of Doing Business and the New Economy

#### (Week 4)

"The Need and Rationale for the Benefit Corporation" White paper, William H. Clark, Jr., Drinker Biddle and Reath, LLP: Larry Vranka, Canonchet Group LLC, pp. 1-21 (Exec Summary, Parts I-III), 2013. 21 Pages

Michelle Giddens, "<u>The Rise Of B Corps Highlights The Emergence Of A New Way Of Doing Business</u>," Forbes, August 2018.

"Towards a Circular Economy: Business Rationale for an Accelerated Transition," Ellen MacArthur Foundation, 2015. 19 pages

Derek Miller, "<u>The Sharing Economy and How it is Changing Businesses</u>," The Balance Small Business, June 25, 2019. **3 pages** 

"<u>Digital Commerce and Youth Employment in Africa</u>," BFA, Commissioned by the Mastercard Foundation, February 2019., pp 1-27. **27 pages** 

#### Case Study:

Headwater Food Hub and the Good Food Collective

## **Learning Objectives**

- 1. Understand the definition of a B-Corporation and how they are this different from a regular for-profit company.
- 2. Understand the incentives and rationales behind why companies might want to become more sustainable, as well as the forces that work against companies deciding to be a B-Corp.
- 3. Be able to define and provide examples of the circular economy.
- 4. Understand alternatives to youth employment in Africa that are being provided by the Internet and digital platforms, as well as their drawbacks.

### Weekly Assignment 4

Answer the following questions by writing a short paragraph for each (approximately 4 to 6 sentences). Be sure to answer each part of the question.

- 1. What is a B-Corporation? What are three business cases (rationales) for a company becoming a B-Corp? What is one disadvantage?
- 2. How would having more companies as B-Corps contribute to sustainable development? Provide clear examples.
- 3. Choose one company you are interested in that is a B-Corps. Go online and look up its most recent annual report. How is being a B-Corps reflected in its practices? Give two examples.
- 4. What is the circular economy? What are three examples of the circular economy in practice?

5. How does youth employment in Africa differ from youth employment in the United States or other high income economies? How are digital platforms impacting youth employment in Africa?

## Collaborative Projects - Week 4

- Your group should begin work on your project.
- You may want to divide up tasks among members of your group.
- Be sure you have the information and data you need from your partner organization to complete your work. If not, reach out for clarification and the resources/information you need.
- We will conduct weekly check-ins with your group and the professor to chart progress, ensure you are on track, and getting the support you need to do your best work.
- You are strongly encouraged to conduct weekly check-in calls with your partner organization—it works well to have a set time each week for this.

#### PART II: SOCIAL INCLUSION

## Sept 24 **Education – Primary and Secondary** (Week 5)

<u>Learning to Realize Education's Promise</u>, World Development Report 2018, World Bank, Forward (by Kim) and Overview, xi and pp 1-27. **28 pages** 

Secondary Education in Africa: Preparing Youth for the Future of Work, "Executive Summary and Chapter 1," pp 7-41, Mastercard Foundation, Toronto, 2019. *This Report is forthcoming: not for citation or distribution.* **34 pages** 

#### Pratham

<u>Case study: Sistema de Aprendizaje Tutorial (SAT)</u> – An innovative, alternative secondary level educational system completed to date by over 300,000 students throughout the Americas—mostly in areas where traditional secondary schools are not available. Pioneered in Columbia, this model has been implemented in over a dozen countries and has been shown to boost learning and life outcomes for students not able to access traditional schools.

Read blog from link above -3 pages

## **Optional**

Evaluation of the SAT Program in Honduras <a href="http://academics.wellesley.edu/Economics/mcewan/PDF/sat.pdf">http://academics.wellesley.edu/Economics/mcewan/PDF/sat.pdf</a> (19 pages)

"Designing Effective Cash Transfer Programs to Boost Schooling Among Young Women in Africa." World Bank working paper 5090, October 2009.

## **Discussion Questions:**

- What progress has been made in enrolling girls and boys in primary, secondary, and for women and men, tertiary education worldwide?
- Where are there the greatest gaps?
- What are the social and economic "returns" to increasing education, especially girls' education?
- Why the concern with "quality" education and learning? (Learning to Realize Education's Promise)
- Why is secondary education especially important in Africa right now?
- How is the nature of work changing, and how can secondary education help with that?
- What were the key factors that led to the success of the SAT program in Latin America? How is this success measured (success in terms of what?). What are some of the weaknesses of the program?

## Weekly Assignment 5

Blogging - Yellow dig

1.

#### Collaborative Projects – Week 5

- Continue to work on your project.
- Conduct weekly check-in with your organization and professor.
- What if any issues need to be resolved?
- Are you on track to meet deadlines?

## Oct 1 Gender, LGBTQ+ and Sustainable Development (Week 6)

<u>Human Rights Watch</u>, (HRW) "Leave No Girl Behind in Africa," June 2018, Read whole report; **18 pages**.

Rosamund Hutt, "This is the state of LGBTI rights around the world in 2018," World Economic Forum, June 14, 2018. Blog - 4 pages

Profiting from Parity: Unlocking the Potential of Women's Businesses in Africa, World Bank Group, 2019, Executive Summary, pp 6-24, **18 pages.** 

<u>Letting Girls Learn</u>, Chapter 1 in Reaching for the Sky, by Urvashi Sahni, Brookings Institution Press, 2017 (12 pages).

## **Discussion Questions:**

## HRW report

1. What obstacles do pregnant young women face in getting an education (be very specific) and what does the Report recommend to address these?

#### LGBTQ Rights

2. Particularly looking at developing countries profiled in this reading, what are some of the forms of discrimination and human rights abuses faced by LGBTQ people and what impact does this have on sustainable development?

#### **Profiting from Parity**

- 3. Why does the productivity of female entrepreneurs differ from male entrepreneurs in Africa? What does the World Bank argue should be done to increase women entrepreneurs productivity?
- 4. What is the economic rationale for increasing productivity of female entrepreneurs? What is the moral rationale?

## Letting Girls Learn

5. What part of Laxmi's story particularly resonates with you? How do you feel the Parma school is addressing or not addressing girls education and its links to sustainable development?

# Oct 8 **Quiz 1, Reflection on Collaborative projects and Project Work** (Week 7)

#### Quiz 1

Complete the 40-minute quiz online by Friday, October 9 at 11:59 pm. The quiz is open book and open note, but should be completed alone without the assistance of

others. Quiz 1 covers material from Module 1 (SDGs) through Module 6 (Gender and LGBTQ+). A good way to review for the quiz is to go through the learning objectives for each module and be sure you understand them, referring back to the readings and lectures as needed.

## Reading

Patti Clayton and Sarah Ash (2009), "Schematic Overview of the DEAL Model for Critical Reflection." **3 pages** 

This week allows for time to reflect on what you have done and learned so far through your collaborative project, and to continue your project work.

## Weekly Assignment

After reading the DEAL Schematic Overview, complete the three steps of the DEAL Model: 1) Describe, 2) Examine, and 3) Articulate Learning, by writing out your answers. Under Examine, choose just one of the categories of learning; personal growth, community engagement, or academic enhancement. Your answers should be thoughtful and draw on specific examples from your work. Please write at least 4 to 6 well composed sentences for each of the three steps.

You may complete this assignment together in discussion with other members of your collaborative working group, if it is helpful to reflect together, but please write out your answers individually based on your own unique perspective and experience.

#### PART III: ENVIRONMENTAL SUSTAINABILITY

## Oct 15 Conservation & Biodiversity

(Week 7) "Ecosystems and Human Well Being, Synthesis: Summary for Decision Makers," Millennium Ecosystem Assessment. Read Preface (p. iii) until p.19. 22 pages

<u>Global Biodiversity Outlook 4</u>, Convention on Biological Diversity. pp. 3-23 **20** pages

"Greener, Healthier, More Sustainable: Why cities of the future need more biodiversity," Article on increasing biodiversity in cities, Viktor Weber, World Economic Forum, January 6, 2020.

# Case Study: Posada Amazonas Eco-lodge and the Ese Eja indigenous community in Peru

"Commons Management and Ecotourism: Ethnographic Evidence from the Amazon," Amanda Stronza, *International Journal of the Commons*, Vol. 4, no. 1, 2010, pp. 56-61. **5 pages** 

http://www.thecommonsjournal.org/index.php/ijc/article/view/137/128

"Communities and Conservation," Case study of Posada Amazonas Ecolodge, Peru, Texas A & M University, 2011.5 pages <a href="http://people.tamu.edu/~j-packard/cases/ANA01\_PosadaAmazonas\_Vargas&Vigo.pdf">http://people.tamu.edu/~j-packard/cases/ANA01\_PosadaAmazonas\_Vargas&Vigo.pdf</a>

Read the case materials carefully; we will divide up into groups and act out roles to decide the future of the Amazonas Lodge during class.

## **Discussion Questions**

- What are eco-system services? And How is Biodiversity defined?
- Why is biological diversity important for sustainable development?
- What is the Convention on Biological Diversity? Has it been effective? How can one measure the impacts?
- What was the model used in the joint venture with the Amazonas Lodge?
- Who are different stakeholders in the Lodge and surrounding ecosystem, and how do their interests and priorities differ?

## Oct 22 Energy and Climate Change 1 (Week 11)

Peter Hawken and Tom Sayer, *Drawdown*, 2017. "Refrigeration" pp 164-165. Reading posted on Blackboard (2 pages). Introduction and Choose 3 solutions.

Reading Packet, Carbon Markets and the Paris Agreement, (15 pages). Posted on Blackboard.

Article on IMF Role in Addressing Climate Change; Center for Global Development, April 2020 <a href="https://www.cgdev.org/blog/what-should-we-ask-imf-climate-">https://www.cgdev.org/blog/what-should-we-ask-imf-climate-</a>

change?utm source=200407&utm medium=cgd email&utm campaign=cgd we ekly

Reading or check out info on European Climate Foundation <a href="https://europeanclimate.org">https://europeanclimate.org</a>

#### **Discussion Questions:**

- Why is destroying refrigerants (and changing the types we use) the number one way to reduce GHG and climate change according to Drawdown?
- How do carbon markets work? What are the advantages and disadvantages of using them to reduce greenhouse gas emissions (GHG)? What is the price of carbon now in the California market (according to the readings)?
- What is the Paris Agreement? How many nations signed on? What are NDCs and how are they enforced?

**Optional Reading Questions:** 

- How does climate change affect the poor, and in particular women, in developing countries?
- Why does deforestation contribute to climate change? What is the vicious cycle discussed in Why Forests, Why Now? What do the authors argue that we should do in terms of preserving forests, and why?
- Understand the case of solar electricity in the Amazon. To what extent is this approach applicable to other regions?
- How does carbon trading work? What about carbon offsets? Should payments to make carbon offsets be considered a social impact investment?
  - What is the case for fair trade coffee? What are the social and economic returns to this model? Is it truly "sustainable"?
  - What was Sustainable Harvest's business model? How was it innovative? What are its strengths and weaknesses? Is it contributing to "social returns" in terms of employment, better livelihoods for farmers, etc.?

## Oct 29 Energy and Climate Change 2

SDG Tracker - Clean Energy, Climate

Consider Environmental Defense Fund Case studies on carbon markets: Brazil-https://www.edf.org/sites/default/files/brazil\_case\_study.pdf

Reading on Green Climate Fund

Frances Seymour and Jonah Busch, <u>Why Forests: Why Now</u>, Center for Global Development, 2016. Executive Summary

Ban-Ki Moon, "Powering Sustainable Energy for All," New York Times Op Ed, January 2012.

 $\underline{http://www.nytimes.com/2012/01/12/opinion/powering-sustainable-energy-for-all.html}$ 

Summary for Policymakers, Intergovernmental Panel on Climate Change (17 pages) http://www.ipcc.ch/pdf/assessment-report/ar4/wg1/ar4-wg1-spm.pdf

Sachs, Jeffrey D. and Guido Schmidt-Traub. Financing for development and climate change post-2015 (**16 pages**) http://unsdsn.org/wp-content/uploads/2014/02/130316-Development-and-Climate-Finance.pdf

"Reaching Peak Emissions," *Nature Climate Change*, 2015 by Robert Jackson, et al.

## Case Study: IDEAAS – Solar electricity to the Brazilian Amazon

"IDEAAS and PSA: Replication in the Amazon," Stanford Business School Case Study, 2007, pages 1-25.

 $\frac{\text{http://www.ideaas.org/admin/editor/imagensUpload/File/IDEAAS\%20and\%20PS}{\text{A }\%20\text{-}\%20\text{Replication}\%20\text{in}\%20\text{the}\%20\text{Amazon}\%20\text{E}-264\%20\text{July}\%20262007.doc}$ 

# Nov 5 **Agriculture, Nutrition, and Food Security** (Week 10)

"The first 1,000 days: No time for malnutrition," Mercy Corps, Accessed 2019. **5 pages including pictures/graphics.** 

"Quick Facts: What you need to know about global hunger," Mercy Corps, Accessed 2019. 6 pages including pictures.

<u>Fixing the Business of Food</u>, Sustainable Development Solutions Network, 2019, Read whole report. **13 pages** 

Case Study: "Harvest Plus Case Study: Biofortification," Word Document, on Blackboard, 9 pages.

## Optional:

Homi Karas and Lorenz Noe, "<u>Are we reducing hunger in the world?</u>" Brookings Institution, April 2019.

#### **Discussion Questions:**

- Why are the first 1000 days a crucial time for a child's development? If lacking in nutrition during this time, what are the results then and later in life?
- What is the cause of hunger worldwide? How can it be addressed?
- How is the global food industry involved in our hunger and nutrition challenges? What does the report recommend it do to address these?
- What does Harvest Plus do to address malnutrition? Do you think this intervention is a) effective, and b) sustainable?

## Nov 12 **Global Health** (Week 12)

Visit <u>SDG Tracker for SDG 3</u>: Health and Wellbeing, United Nations. Ritchie et al, "Measuring Progress Toward the Sustainable Development Goals," SDG-Tracker.org website, 2018. <u>Review all of the targets</u> under SDG 3 and progress to date-some great graphics here. **Graphics. Review and read charts.** 

"State of World Population 2019," UNFPA, Read Forward and Ch 1, pp 3-21,. 18 pages.

"Sagitarix Case: Community Health Care in Kenya," 2019 See handout on Blackboard – **16 pages.** This case is about the work being done in Kenya by Dr. Moka Lantum, our guest speaker this week:

## Case Study: Sagitarix in Kenya

Sagitarix is developing health centers and distributing medicine at low cost in Kenyan low-income communities to help meet SDG 3 and provide universal health care in a low-income community setting. Sagitarix is a local community health organization based in Kenya and founded by Dr. Lantum. It helps local communities by providing mobile care and small clinics where diagnosis and inexpensive medicines are available for the most common diseases and health issues, including non-communicable diseases (diabetes, hypertension) as well as malaria. Sagatarix also refers pregnant women and mothers for care at local hospitals.

## **Discussion Questions:**

- How is the world doing in terms of meeting the SDG 3 Global Health and Wellbeing targets? Discuss at least 2 targets and our progress and gaps.
- Are women having their choices and needs met when it comes to contraception? Do they have access to safe contraception? If so, where and where not?
- What was the importance of the International Conference on Population and Development in1994? What was the shift in thinking at that time about how to address population growth?
- How is access to Sexual and Reproductive Health addressed (or not) in the MDGs vs SDGs? Is recognition of sexual and reproductive <u>rights</u> a part of the SDGs?
- What is the model Sagitarix is using to provide health services and medicine? How is this supported financially, and do you think it can be sustainable?

## **Optional Readings**

Universal Health Care and <u>Philips Case Study: Community Life Centers</u>, 2019. 11 pages; lots of graphics.

Watch: Video on Philips Community Life Centers

"Maternal Health in Nigeria: Facts and Figures," African Population and Health Research Center, June 2017.

"A Milestone in Africa: No Polio Cases in a Year," New York Times, August 11, 2015.

## Nov 19 **Quiz 2 and Personal Reflection**

#### Quiz 2

Complete the 40-minute quiz online by Friday, December 4 at 11:59 pm. The quiz is open book and open note, but should be completed alone without the assistance of others.

Quiz 2 covers material from Module 7 (Biodiversity) through Module 10?? (Global Health) A good way to review for the quiz is to go through the learning objectives for each module and be sure you understand them, referring back to the readings and lectures as needed.

## Reading

Review Patti Clayton and Sarah Ash (2009), "Schematic Overview of the DEAL Model for Critical Reflection." **3 pages** 

This week allows for time to reflect on what you have done and learned so far through your collaborative project, and to continue your project work.

#### **Weekly Assignment**

After rereading the DEAL Schematic Overview, complete the three steps of the DEAL Model: 1) Describe, 2) Examine, and 3) Articulate Learning, by writing out your answers. Under Examine, choose just one of the categories of learning; personal growth, community engagement, or academic enhancement. This category should be different from the one you picked last time. Your answers should be thoughtful and draw on specific examples from your work. Please write at least 4 to 6 well composed sentences for each of the three steps.

You may complete this assignment together in discussion with other members of your collaborative working group, if it is helpful to reflect together, but please write out your answers individually based on your own unique perspective and experience.

Nov 26 THANKSGIVING BREAK – No class

#### **Guest Lecture on International Environmental Treaties**

(Week 13) Guest lecture: Terry Noto, Environmental Lawyer and Visiting Professor, U of R

Reading: We will have a short reading on international treaties, TBD.

## Optional:

World Wildlife Fund, *Living Blue Planet Report: Species, habitats and human well-being*, 2015 (pp 3-61) Glossy report.

http://assets.wwf.org.uk/downloads/living\_blue\_planet\_report\_2015.pdf

Reading on water scarcity (TBD)

## **Case Study: The Marine Stewardship Council (MSC)**

Sustainably harvested fish and eco-labeling.

MSC Annual Report 2014-15 (pp 1-31) Glossy Report

 $\frac{https://www.msc.org/documents/msc-brochures/annual-report-archive/annual-report-2014-15-english}{}$ 

#### Critical Review by NPR

 $\underline{\text{http://www.npr.org/2013/02/11/171376509/is-sustainable-labeled-seafood-really-sustainable}}$ 

## MSC's Response

http://media.npr.org/documents/2013/feb/MSCresponse.pdf

#### **Discussion Questions**

- What are the major threats to the world's fresh and salt water according to WWF?
- What are our current water resources and what contributes to water scarcity?
- What are the major stresses faced by oceans? How is this measured?
- How does eco-labeling like that of the MSC work? Is it effective in promoting sustainable fisheries? Do companies have an incentive to do it? Why?
- What are its weaknesses? What was NPR's critique?

#### Dec 3 – **Project Work**

## Dec 10 - Final Presentations of Student Projects and Class Celebration

Each group will present their project to the class and we will celebrate your accomplishments.

## **Course Requirements**

#### Assessments

2 Quizzes (online)

### Readings, Lectures, and Participation

All students are expected to complete all of the readings every week and to be familiar with the arguments made and information explained. Learning objectives are provided on the syllabus to help guide your reading. Be prepared to discuss these questions in class.

All students are expected to attend the live online lectures each week. Class time will be shortened from the designated 2 hours 40 minutes to 1 hour 45 minutes to reduce online Zoom fatigue. Each week I will give an live, online lecture accompanied by slides, followed by class discussion.

Class discussion is an important part of the course. I expect all students to participate actively in our class discussions. This will be difficult in our online environment, but I will do my best to facilitate discussion. Even if you are uncomfortable speaking in class, I urge you to step out of your comfort zone as much as possible. I pledge to try to create a supportive classroom environment in which everyone's comments are welcomed and valued. Developing confidence in public speaking is a crucial skill, and is important for the overall quality of our joint learning. I also encourage you to share any personal experiences you have that may reflect on and help us understand the topic at hand.

All readings are available online and/or via electronic reserves on Blackboard.

## Weekly Assignments

Most weeks, students will complete a written assignment, answering several questions about the readings. These are designed to account for some of in-person class time that we will miss due to COVID-19; they allow you to share your learning from the readings given the shortened period we have for class discussion, as I have shortened our nearly 3-hour class to avoid Zoom fatigue.

Given these weekly assignments, I have reduced the amount and weighting of assessments; instead of a mid-term and/or final exam we will have two short quizzes that are weighted less heavily in your grade.

#### Collaborative Projects for Organizations

Each student will work with a small group of other students from the course to complete a project for an organization (business or non-profit) involved in some aspect of sustainable development. This will be an important part of the course and require significant outside work. It will be a great opportunity to gain work experience in the real world with an organization or company committed to sustainable development, and to meaningfully contribute to their efforts.

Each group will also make a final presentation (12-15 minutes) to the class about their organization and its relationship to sustainable development, and their final project. These presentations will be given during our last class session.

## Grading

Class Discussion & Participation	15%
Weekly Writing Assignments	25%

(Weekly assignments are graded check, check minus and check plus)

Quiz 1	10%
Quiz 2	10%
Final Project	40%

I will drop your lowest grade on the weekly writing assignments and will also provide opportunity to earn up to 4 points of extra credit for the course.