Financial Innovations for Economic Development: Innovative Finance for SDGs

MBA 55721- Fall Semester 2020

PROFESSOR: Glenn Yago
EMAIL: glenn.yago@mail.huji.ac.il

PHONE: +972.2.563-0175 ext. 34 or 31
OFFICE HOURS: Tuesdays each week for review and/or consultation on project implementation plan

CLASS Sessions: Wednesdays, October 21, 2020-January 22, 2021—Hybrid Course—6:30-9:00 p.m. (Israel Time)
Zoom connection will be provided for on-line students. Classes will be held (subject to Health Ministry guidelines) at the Jerusalem Institute for Policy Research, Seminar Room, Bet Elayshar-Hebrew University of Jerusalem Bldg, 20 Radak St., Jerusalem-Rehavia 9218604(between Safra and Mt. Scopus Campus). Click here for maplink.

Prof. Glenn Yago
glenn@jerusaleminstitute.org.il

DESCRIPTION

This course will focus on the means and methods of finance applied to social, economic, and environmental challenges facing developing economies. Financial innovations give rise to new intermediaries (e.g., community venture capital, permanent capital facilities, revolving loan funds, social investment banks, business development companies, venture investment trusts, etc.), new types of instruments (e.g., blended finance structured finance, microfinance, social, environmental and development impact bonds, green bonds, diaspora bonds, catastrophic risk bonds, royalty trusts, community investment notes, and risk pooling finance mechanisms and facilities), and new services, platforms or techniques (e.g., ETFs, impact investing, public-private partnerships, financial intermediary facilities, international finance facility for immunization, product development partnerships, value-chain financing) to create jobs, build communities, and enable capital formation and economic growth.

OBJECTIVES

These sessions will survey the application of innovative financing emerging through new products and services, new processes and operations and organizational forms in addressing problems as diverse as entrepreneurial finance, renewable energy, environmental finance, global health, accelerating medical solutions, regional development, affordable housing, urban revitalization and infrastructure. Through case studies and reviews of financial policies, programs and product innovation, students will discover why capital structure matters in aligning diverse interests into new business models for sustainable social and economic change. Students will work through problem sets for innovative financing structures for development projects and enterprises. Students will acquire and apply data gathering, economic, and financial analytical skills to identify specific market failures in developing economies enabling them to apply appropriate financial tools to bridge capital gaps for project and enterprise finance. This would include the ability to identify innovation-led growth targets (e.g., increased crop yields, reduction of disease incidence, lower credit access costs), choose a coherent, time and risk-balanced portfolio of development initiatives required to meet a measurable and tangible development target (e.g., prevention, diagnostics, treatment for global health; job creation and sustainable income and wealth formation); differentiate business, market and technological opportunities for a development target (e.g., on-grid, off-grid, and/or undergrid renewable energy); evolve, accelerate, extend and scale sustainable development...
business models; and identify criteria for replication (capitalizing external networks, motivate and reward repeating, positive-sum economic development strategies). We will discover why capital structure matters in aligning diverse interests into new business models for social and economic change to address Sustainable Development Goals for 2030. Students will research practical applications to financing challenges for economic development.

**REQUIREMENTS:**

All readings are required. Together with attendance at the lectures and participation in structured discussions they will provide students with a tool kit to develop a concise proposal focused on financing a targeted development impact (the course’s final project). This end of semester project will be a proposal for the application of an innovative finance product(s) to a project or program that would target a specific sector (agriculture/food, health, energy, or environmental), geography (developing/frontier economy); and/or technology transfer or development application related to the UN’s sustainable development goals. This will require a description of the proposed project or program, milestones, project targets, outputs, inputs (including financial, technology and intellectual property inputs), identification and quantification of social, economic and/or environmental outcomes, proposed capital structure, sources and uses of funds and a targeted range of return on investment and social/environmental impact (including identification of potential avoided costs). This would include the identification of specific financial tools (bonds, notes, guarantees and credit enhancement, grants, performance based contracts, revolving loan funds or structured finance product, etc.) and how they might be applied to serve the development target.

Themes for these project proposals would include increasing food and agriculture (agricultural productivity, improve food quality and sustainability), global health (including diagnostics, primary care and community projects, treatment modalities and preventive medicine; bio based and sustainable solutions), energy (low carbon projects and climate change adaptation), and environmental finance (sustainable water, land and forest management, conservation and ecosystem services, biodiversity, drought prevention, carbon projects, etc.). Projects could include:

- **SME finance for enterprise development** (compare and contrast specific private equity, revolving loan fund models, structured finance solution etc.);
- **Environmental or energy infrastructure** (use modern finance mechanisms such as risk pooling and risk transfer to create climate response systems to protect food security, technology transfer for water technology, water quality/recycling, distributed water treatment and production or on-grid, off-grid, or under-grid renewable energy project);
- **Agricultural or food innovation** (plant or soil science technology innovations, post-harvest, or supply chain finance models utilizing agricultural pull-mechanisms);
- **Global health innovation** (development impact bond, product development partnership, advanced market commitment applied to a vaccine, treatment modality, or preventive measure).

These project proposals would address a prospective practical development project and explicate the deployment of a development finance innovation.

The project proposal would address how innovative finance could design a capital structure for a project or development target that mobilizes:

1) **new pools of private and public revenue streams**;

2) **new revenues options** (e.g., tax, charges, fees, bond sales);
3) new incentives (frontloading and debt-based instruments, philanthropic/government guarantees, public-private partnerships, insurance, and other market-based mechanisms).

These projects can be completed as individual (or teams of two reflecting the team members’ increased level of effort to meet this assignment’s objective).

Guidelines and an example of such a project implementation proposal will be discussed in the first class on October 21.

Through the projects, students will demonstrate their ability to:

- Design and construct an innovative finance application (for either a proof of concept or beta site project) in a developing economy;
- Measure, analyze and report development impacts of an innovative finance project;
- Identify and develop how a development impact investment would benefit and expand capital access through the creative use of innovative financing tools;
- Assist a high-impact project to access flexible market and below-market financial tools;
- Identify how to structure the transaction and identify potential interested partners with aligned interests in the proposed project.

Assessment:

- Class discussion and attendance 35%
- Final Project Implementation Plan: 65%

EVALUATION

1) Final paper-Project Implementation Proposal

Requirements:

- Students are requested to choose a topic and submit a one-page outline prior class on (November 25)
- Upon approval of the topic and the outline, students are required to compose 15-20 pages (double-spaced) and submit the final paper no later than (January 29).
- Late papers will not be accepted.
- The project implementation plan will be based on diagnostic questions the students wish to pursue focused upon a related to one more specific Sustainable Development Goals related to specific impact measurements.
- Their project will need to address the following questions:
  1. What are the financial bottlenecks for the SDG challenges?
  2. Why isn’t funding availability? Does the market work?
  3. If not, why not?
  4. Who could fund and what do they care about?
  5. What financial tools can help catalyze that funding through a development capital structure stack or design?
Additional questions that will need to be addressed in each project implementation proposal would also include:

1. **Project:** What is the project proposing to do?
2. **Opportunity:** What need is it meeting? Who is interested in the success of this project? Who are the stakeholders?
3. **Team:** Who is doing it? What is their experience, expertise, roles?
4. **Market:** Who is the customer? What are the marketing channels to reach the customer?
5. **Costs:** How much does it cost to build? To operate?
6. **Capital Structure:** How will it be financed? By whom and under what terms and conditions? What are the returns to each investor?
7. **Plan:** What is the workplan and milestones?
8. **Risks:** What are the risks and how will the risks be mitigated?
9. **Outcomes:** What are the outcomes and how will they be measured?

Students will need to address these issues in their proposal:
- Different innovative financing tools and resulting instruments for potential impact investments;
- Methods of risk mitigation;
- Different models for structuring impact investment funds, blended finance models and capital structures, and pooled-securities to develop the financing pipeline;
- Examine use of catalytic first loss models, grants, loans, equity, etc. that can mobilize for impact enterprise and project finance addressing development goals.
- Creative ways to target small and middle-size enterprises and projects through pooled securities, revolving loan facilities, fintech, and alternative risk assessment and management models.

These project implementation proposals could be considered for possible Fieldwork fellowships applications by eligible students at the Milken Innovation Center in conjunction with the Blum Lab for Developing Economies at the Jerusalem Institute or existing development finance field sites by other partners in the field in Africa, India, or Latin America as part of our ongoing collaboration between UC-Berkeley and the Jerusalem Institute-Milken Innovation Center/Hebrew University of Jerusalem School of Business Development Finance Practice Program.

2) **Final paper (65%)**

Requirements:
- Students are requested to choose a topic and submit a one-page outline in class on **November 25, 2020.** Upon approval of the topic and the outline, students are required to compose 15-20 pages (double-spaced) and submit the final paper no later than **January 29, 2021.**
- Late papers will not be accepted, except under exceptional circumstances.
- The project implementation plan will be based on diagnostic questions the students wish to pursue focused upon a related to one more specific Sustainable Development Goals related to specific impact measurements.
- Their project will need to address the following questions:
  1. What are the financial bottlenecks for the SDG challenges?
  2. Why isn’t funding availability? Does the market work?
  3. If not, why not?
  4. Who could fund and what do they care about?
  5. What financial tools can help catalyze that funding through a development capital structure stack or design?
Additional questions that will need to be addressed in each project implementation proposal would also include:

- **Project:** What is the project proposing to do?
- **Opportunity:** What need is it meeting? Who is interested in the success of this project? Who are the stakeholders?
- **Team:** Who is doing it? What is their experience, expertise, roles?
- **Market:** Who is the customer? What are the marketing channels to reach the customer?
- **Costs:** How much does it cost to build? To operate?
- **Capital Structure:** How will it be financed? By whom and under what terms and conditions? What are the returns to each investor?
- **Plan:** What is the work plan and milestones?
- **Risks:** What are the risks and how will the risks be mitigated?
- **Outcomes:** What are the outcomes and how will they be measured?

Students will need to address these issues in their proposal:

- Different innovative financing tools and resulting instruments for potential impact investments;
- Methods of risk mitigation;
- Different models for structuring impact investment funds, blended finance models and capital structures, and pooled-securities to develop the financing pipeline;
- Examine use of catalytic first loss models, grants, loans, equity, etc. that can be mobilize for impact enterprise and project finance addressing development goals.
- Creative ways to target small and middle-size enterprises and projects through pooled securities, revolving loan facilities, fintech, and alternative risk assessment and management models.

3) **Completion of case study write-ups and readings presentations for class discussion:** You will be asked to review and present case studies and/or readings related to the course from those listed below. Students will be asked to choose their presentation groups by the end of the first class. This summary presentation and related class attendance and engagement in lectures and questions will comprise the second area of course evaluation. (35%) Please note presentation sign-up page on the course website on Moodle.
COURSE UNIT OVERVIEW*

*Instructor Lecture and Overview (either synchronous or asynchronous) will precede each Guest Lecture or briefer case study presentations as noted below

I. Introduction to Finance Toolkit and Innovative Finance (October 21)

II. Structural Changes in Capital Markets and Development Finance (October 28)
   a. Global Trends
   b. What is Financial Innovation? From Structured to Blended Finance
   c. *Practitioner Guest Lecture: Carole Biau and John Shellhas, Global Market Development Center-Milken Institute, Capital Market Infrastructure and Developing Markets

III. Why and How does Capital Structure Matter? (November 4)

IV. Entrepreneurial Finance (November 11)
   Practitioner Guest Lecture:
   David Ram, Partner, Goldrock Capital; Chair, Ogen – Israel Social Loan Fund Committee. Creating a Capital Structure for a Social Bank (https://ogen.org/en/)
   Ana Quriola, Avenews, Former Fellow, FinTech for Agri-Trade: Digitizing the Supply Chain
   a. Lifecycle of Finance
   b. Business Finance and Capital Structure
   c. Equity, Debt finance, and Hybrid Debt Instruments
   d. SME Finance

V. Impact Investment and Social Finance: Social Impact Bonds and Beyond (November 18)
   *Practitioner Guest Lecture:
   Gila Norich, Director, Advisory Services, Social Finance-Israel, Impact Metrics and Development Impact
   Oluwagbemisola Akinsipe, Energy and Resources Engineering, University of California-Berkeley, Development Impact Bond for Secondary Education Achievement in Nigeria
   a. Pay for performance contracting
   b. Full-spectrum Asset Class Product and Program Development Finance
   c. Risk-Return-Impact: Metrics
VI. Financing Ideas: Science and Tech Finance (November 25)

Special Session: Project Implementation Plan Workshop with African Mentors

Dr. Olawale Olayide, IMAGES-Univeristy of Ibadan, (Agriculture and Food Systems)
Prof. Desalegn Ayal, Center for Food Security, University of Addis Ababa, (Agriculture and Food Systems),
Dr. Greenwell Matchaya, International Water Management Institute, South Africa, (Water)
Dr. Olufunke Alaba, School of Public Health and Family Medicine, University of Cape Town, (Health and Zoonotic Diseases)
Steve Zecher, Jerusalem Institute-Milken Innovation Center, (FinTech/Financial Inclusion)
Prof. Glenn Yago, Hebrew University of Jerusalem School of Business/Jerusalem Institute-Milken Innovation Center, (Energy)

Guest Lecture: Prof. Andrew Lo, Financial Engineering Lab, MIT, Can Financial Engineering Cure Cancer?

a. From Venture Capital Models to Research Bond Obligations

VII. Project Finance Mechanics 1 (December 2)

Practitioner Guest Lecture:

Caitlin Maclean, Innovative Finance, Milken Institute, Financing Urban Resiliency

a. Infrastructure Projects
b. Urban Revitalization

VIII. Project Finance Mechanics 2 (December 9)

a. Housing
b. Cultural Heritage and Tourism

IX. Environmental Finance (December 16)

Practitioner Guest Lecture:

Climate Change and Financial Innovation

Frederic Samama, Chief Responsive Investment Officer, CPR-Amundi Group

X. Development Finance—Blended Finance (Case Study Applications) (December 23)

Practitioner Guest Lecture:

Jeremy Bentley, Citi Group (Israel), Blended Financing and Themed Bonds: Lowering the Cost of Capital

XI. Development Finance-Energy (Case Study Applications) (December 30)

Practitioner Guest Lecture:

Angela Homsi and Yariv Cohen, Ignite Power, Aganza Fund, Structuring Impact Projects
XII. Development Finance—Food-Water Nexus (Case Study Applications) (January 6)

Practitioner Guest Lecturers:

Dr. Olawale Olayide, IMAGES, University of Ibadan

Naty Barak, Chief Sustainability Officer, Netafim/Obia, Community Irrigation Model: Case of Karnataka

Case Study: Kangai Elosy Mathiu, Fellow, Small Scale Irrigation Hub and Spoke Model (Kenya)

XIII. Development Finance – Global Health (January 13)

Practitioner Guest Lecture:

Ariel Beery, Co-Founder and CEO, Mobile ODT/ General Partner, Co-Velocity, Sustainable and Scalable Solutions in Global Health

XIV. Project Implementation Plan Presentations by Student Teams (January 20)

With Mentors:

Dr. Olawale Olayide, IMAGES-University of Ibadan, (Agriculture and Food Systems)
Prof. Desalegn Ayal, Center for Food Security, University of Addis Ababa, (Agriculture and Food Systems),
Dr. Greenwell Matchaya, International Water Management Institute, South Africa, (Water)
Dr. Olufunke Alaba, School of Public Health and Family Medicine, University of Cape Town, (Health and Zoonotic Diseases)
Steve Zecher, Jerusalem Institute-Milken Innovation Center, (FinTech/Financial Inclusion)
Prof. Glenn Yago, Hebrew University of Jerusalem School of Business/Jerusalem Institute-Milken Innovation Center, (Energy)

**Course Assignments and Readings (Detailed Study Plan)**

Reference Resource throughout course: Miken Institute 5-Minute Finance
The course presumes some basic knowledge of economics and finance. Please use our 5-Minute Finance app above for review as well as the Glossary and Appendix link supplied as part of the course.

Remedial review and terms (present value, compound interest, understanding capital structure, investment and consumption, Black-Scholes Formula, forward and future contracts, etc.) are easily accessible at Kahn Academic Finance and Capital Markets.

**Required Readings for Lectures**

*For Student Presentations*

I. Introduction to Financial Toolkit and Innovative Finance for Development

   a. Chapter 1: The Evolution of Finance;

Key Videos to Watch:

VIDEO: Hans Rosling, Global Population Growth
VIDEO: Tyler Cowan, Marginal Revolution, On Romer’s contribution to development economics
Endogenous Technological Change
VIDEO: EconJohn, Endogenous (New) Growth Model
VIDEO: EconJohn, Endogenous Growth Models-Learning by Doing

II. Structural Changes in Capital Markets (October 28)

Practitioner Guest Lecturers: Carole Biau and John Schellhase, Building Capital Market Infrastructure for Developing Economies, Center for Global Market Development, Milken Institute

Key Videos:

Somya Singvi, MIT, *Unifying Ag Markets for Price Discovery* (Levi, et.al. Case study above)  

### III/IV. Entrepreneurial Finance – Why Capital Structure Matters *(November 4 and 11)*

**Practitioner Guest Lecture:**

David Ram, Partner, Goldrock Capital; Chair, Ogen – Israel Social Loan Fund Committee. *Creating a Capital Structure for a Social Bank* (https://ogen.org/en/)

Ana Quriola, Avenews, Former Fellow, *FinTech for Agri-Trade: Digitizing the Supply Chain*

Background reading: ***“Capital Access in Israel's Underserved Market,”* Financial Innovations Lab Report, Milken Innovation Center-Jerusalem Institute, March 2015.

   a. Chapter 3: Innovations in Business Finance;  
   b. Appendix: The Black-Scholes Formula.


   **See Case Studies on:** Azito Energy, Eobank, Cargil SIB on Cocoa Loans, Bayport (Bond Markets), Nutrition, Education (Bridge Academies), and Helios (Private Equity).


   1: Aspada, India & Bangladesh*


Key Videos to watch:

Paddy Hirsh, *Capital Structure Explained*

Managerial Finance, *Capital Structure*

Aspada News Story, *Young Turks*
V. Impact Investing and Social Finance (November 18)

*Practitioner Guest Lecture:

Gila Norich, Director, Advisory Services, Social Finance-Israel, Impact Metrics and Development Impact

Oluwagbemisola Akinsipe, Energy and Resources Engineering, University of California-Berkeley, Development Impact Bond for Secondary Education Achievement in Nigeria


Measuring Impact


Videos to Watch:

Toby Eccles, Investing in Social Change
Measuring Real Impact: An Overview of the Impact Weighted Account Initiative  
(Sir Ronald Cohen, GSG Impact; Prof. George Serafeim, Harvard Business School; Quyen Tran, Blackrock)

VI. Financing Ideas: Science and Tech Finance (November 25)

Special Session: Project Implementation Plan Workshop with African Mentors

- Dr. Olawale Olayide, IMAGES-University of Ibadan, (Agriculture and Food Systems)
- Prof. Desalegn Ayal, Center for Food Security, University of Addis Ababa, (Agriculture and Food Systems)
- Dr. Greenwell Matchaya, International Water Management Institute, South Africa, (Water)
- Dr. Olufunke Alaba, School of Public Health and Family Medicine, University of Cape Town, (Health and Zoonotic Diseases)
- Steve Zecher, Jerusalem Institute-Milken Innovation Center, (FinTech/Financial Inclusion)
- Prof. Glenn Yago, Hebrew University of Jerusalem School of Business/Jerusalem Institute-Milken Innovation Center, (Energy)

Guest Lecture: Prof. Andrew Lo, Financial Engineering Lab, MIT, Can Financial Engineering Cure Cancer?

3. Walsh PP, Murphy E, Horan D. “The Role of Science, Technology and Innovation in the UN 2030 Agenda”, May 2020, Technological Forecasting and Social Change.154


Videos to Watch:

Andrew Lo, MIT Financial Engineering Lab, Can Financial Engineering Cure Cancer?
Anya Eldan, Start-Up Division, Israel Innovation Authority, Bio-Convergence
Andrew Lo, MIT Financial Engineering Lab, Lessons from Hollywood

VII. Project Finance Mechanics 1 (December 2)

Practitioner Guest Lecture:

Caitlin Maclean, Innovative Finance, Milken Institute, Financing Urban Resiliency
Case Study: “Financing Urban Resiliency: Coastal Resiliency in Lower Manhattan,” Milken Institute Financing, Financial Innovation Lab, September 2019

Urban Revitalization –

Public Finance Innovations

6. **“New Perspectives on Climate Finance for Cities: Finance Solutions for New and Emerging Infrastructure Approaches to Urban Climate Mitigation and Adaptation,” Siemens-Citi-C40 Cities..
7. Case Study: “Hartford County Metropolitan District,” Moody’s Credit Opinion, July 2018

Videos to Watch:

“Filling the Global Infrastructure Gap” Milken Institute Global Conference, June 2019

(Note specifically, Laura Drescher, Quantified Ventures; also their website on outcomes-based finance for infrastructure and case studies of DC Environmental Impact Bond and first publicly offered environmental impact bond as key financial innovations here).

Housing

   a. Chapter 4: Innovations in Housing Finance.
2. **Allen, Franklin, James R. Barth, and Glenn Yago, Fixing the Housing Market: Financial Innovations for the Future:
   a. Chapter 1, “Housing Crises Go Global: The Boom, The Bust and Beyond,” 1-68;
   b. Chapter 4: “Housing in Emerging Markets,” 103-138;
3. ***“Toward Affordable Housing in Israel,” Financial Innovations Lab Report, Milken Innovation Center-Jerusalem Institute, October 2013.

Community Development


VIII. Project Finance Mechanics 2 (December 9)

Regional Development and Project Finance – Infrastructure, Culture, Tourism

3. ***“Innovative Finance to Address Africa’s Infrastructure Needs,” Financial Innovations Lab, Milken Institute, May 2016.


**VIDEO:** Hospitality in the Kidron/Wadi El-Nar River Basin-Green Pilgrimage Mountain Bike  
**VIDEO:** Kidron Wadi El Nar: The Politics of Sewage

IX. **Environmental Finance (December 16)**

Practitioner Guest Lecture:

*Climate Change and Financial Innovation*
Frederic Samama, Chief Investment Officer, CPR-Amundi Group

UN Environment Program-Finance Initiative ([https://www.unepfi.org/](https://www.unepfi.org/))

   a. Chapter 5: Environmental Finance: Innovating to Save The Planet.

2. **World Bank Outlook 2050: Strategic Directions Note:** Supporting countries to Meet Long-Term Goals of Decarbonization, 2020: 48-78 (Advancing Cross-Cutting Solutions—focus for project implementation plans).


   a. Chapter 1: A Brief Survey of Environmental Asset Classes.


7. **Case Study:** “Converting Emerging Markets to Green Finance: Amundi and the IFC, Imperial College Business School, March 2020.

8. **Case Study:** DC Water Environmental Impact Bond, Goldman Sachs/Calvert Foundation, 2016


10. **Case Study:** Brennan, M. Growing the US Green Bond Market: Lab 2, Milken Institute, Financial Innovations Lab Report, September 2020


12. **Case Study:** Green FinTech Blockchain and Energy Grid  
   Required reading: Deloitte. What is a blockchain (Canvas)  
   Suggested resources:  
   Blockchain is building a new kind of energy grid, Technology Review

Brooklyn Smart Grid – Blockchain-enabled


17. Case Study: The Great Lakes and St. Lawrence Blue Growth Fund Final Report, 2017

VIDEO: The Price on Nature (Richard Sandor)

Solid Waste and WASH (Water, Sanitation and Hygiene)


2. VIDEO: Kidron Wadi-El Nar


River Revitalization and Smart Watershed Management


Biodiversity


**X. Global Development Finance – Blended Finance (December 23)**

Practitioner Guest Lecture:

Jeremy Bentley, Citi Group (Israel), **Blended Financing and Themed Bonds: Lowering the Weighted Average Cost of Capital**


**XI. Global Development Finance -Energy (December 30)**

Practitioner Guest Lecture: Angela Homsi and Yariv Cohen, Ignite Power, Aganza Fund, *Structuring Impact Projects*

Case Studies for Catastrophic Risk and Climate Change

   a. *Case Study 3*: Ignite Power, Rwanda;
   b. *Case Study 5*: Gigawatt Global, Rwanda;

Case Studies for Energy


XII. Development Finance: Food Water Nexus (January 6)

Practitioner Lecturer:

Naty Barak, Chief Sustainability Officer, Netafim-OBIA, The Community Irrigation Model: Lessons from Karanataka

Dr. Olawale Oliyade, IMAGES/Development Practice, University of Ibadan (Nigeria)

Case Study: Kangai Elosy Mathiu, Fellow, Small Scale Irrigation Hub and Spoke Model (Kenya)

1. **Accelerating Agritech Solutions in Israel, California, and Developing Economies**, Financial Innovations Lab Report, Milken Innovation Center/Blum Lab, Jerusalem Institute, June 2020.
5. Cooley,Larry and Julie Howard, *Scale Up Sourcebook: Innovations in Agriculture*, Purdue University, 2018
8. Pay for Results in Development: A Primer for Practitioners, USAID/Palladium, 2018
   a. Case Study 4: The Case of Aflatoxin and Maize Production Pay-for-Outcomes;
      See also: Ag Results Summary, here.
   b. Case Study 2: Financing Kidron/Wadi El Nar Revitalization-Waste Water; Treatment and 
      c. Regional Agriculture and Tourism Development.
14. * Case Study “Financing Fisheries Reform: Blended capital approaches in support of sustainable wild-capture fisheries,” Environmental Defense Fund and Duke Nicholas Institute for Environmental Policy Solutions, January 18, 2018
15. * Case Study “Financing Sustainable Land Use: Unlocking business opportunities in sustainable land use with blended finance,” KOIS Invest and Blended Finance Taskforce, January 2018

XIII. **Global Development Finance—Global Health —(January 13)**

Practitioner Guest Lecture:

Ariel Beery, Co-Founder and CEO, Mobile ODT/ General Partner, Co-Velocity, Sustainable and Scalable Tech Solutions in Global Health

3. Lorcan Clarke, et.al., “Development Impact Bonds Targeting Health Outcomes,” Center for Global Development 133, December 2018
4. *** Financing the Control of Tuberculosis,” Financial Innovations Lab Report, Milken Institute, 2015.
7. * Case Study “The Utkrisht Impact Bond Case Study,” Convergence: Blending Global Finance: January 2018

XIV. Program Implementation Plan Team Presentations (January 20—Special Session)

XV. Continuation of Plan Presentations (January 22—Special Session)