

UPPSALA ONE HEALTH CONFERENCE
TIMOTHY BOULEY PRESENTATION NOTES
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Thank you, Sharon.

We've heard a tremendous amount about One Health and infectious disease threats-- and some about **opportunities**...which are really what I want to focus on today because they get us closer to solutions.

As you said, I work at the World Bank where our scope nearly **190 countries** – both donors (wealthy countries) and clients (low income countries). Our annual investment portfolio is more than **\$60bn** across more than a dozen sectors, and individual investments can easily reach **several hundred million** dollars and span **multiple countries**.

And so we must **balance the diverse needs and interests** of many actors, both when implementing an individual investment or when developing a new knowledge area, like One Health.

Either way it is critical to **keep an eye** to the research and technical community, looking for **best practices and frontier innovations** that we can include to ensure our work is as good as it can be.

And for that, I'm incredibly **grateful to be here**. There have been very **rich conversations** on infectious disease and one health so far that are entirely relevant to our programming.

Quickly: what is the World Bank?

We **were initiated after WWII** to help re-build Europe, but over time that mission has evolved and we now working toward **the twin goals** of alleviating extreme poverty and increasing shared prosperity.

We do this primarily by providing **low-interest loans and interest-free credit and grants**.

However, we also work by **convening** people- both public and private sector so that we might crowd in experience and solutions to deliver results. And we **generate knowledge**; we write reports, develop the global goods agenda around topics like climate change – or one health; and we provide **direct technical assistance** to countries – rich and poor, to help them gain access to resources like those that we have here today.

Why do we even care about One Health?

For one, it aligns with **international agendas**.

It underpins the **Sustainable Development Goals**- the universal UN-led call to action to protect the planet and people.

Of the 17 goals – these **6 are directly aligned with the science and practice of One Health**; they have to do with bio-physical processes and achieving success in any of them requires coordination with the others. **One Health provides the framework for understanding and implementing to make this happen**.

Success in the other 11 is contingent upon **socially-mediated institutions**; which can only operate effectively in a healthy environment – and so though indirect, these 11 are also fundamentally dependent on a One Health approach.

There has also been considerable action in this field over the past two decades- and so we are really **only building on** what has been done.

There has been central coordination through the **OHI and OHC and conferences**.

There have been **volumes of analysis** on One Health topics like AMR that link to global one health approaches to crowd more knowledge into this space.

There are **dedicated programs on dimensions of One Health** – like climate change and health; with policy-making oriented conferences, indicator tracking, and civil-society led campaigns.

And there are **regional initiatives** that have taken shape around One Health concepts – like these two in Africa that bring together scientists and policy makers toward more concerted One Health action.

A One Health approach is also incredibly important in the **regions and countries** in which we work.

Dr. Daszak showed this slide yesterday – which illustrates where **EID events are caused by zoonotic pathogens from wildlife**.

When overlain with a map of World Bank regions (i.e. where we work), you'll see there these regions **fit squarely in our investment geographies**.

Infectious disease and One Health are also important to our business lines.

We are the leading global financier of agriculture, with **\$2.9 billion** in new commitments **in 2016**.

The Environment and Natural Resources Global Practice oversees a portfolio of about **170 projects** worth about **\$7.4 billion**.

The WBG HNP portfolio is almost **\$12bn**.

And we have an extensive and growing investments in climate change mitigation and adaptation across sector, with more than **\$10bn to 177 projects in 2016 alone** and **\$63bn from FY 2011-16**.

It just makes sense to work at the intersection of these.

But of course, **infectious disease poses considerable risk** to achieving best outcomes.

We've seen these before, but here are some quick facts illustrating how a One Health approach is critical to **achieving our business lines**.

Infectious diseases **undermine human health**, they **undermine animal health**, and they stand to **get worse in the future**.

If the tangible impacts weren't enough, the **financial ones** should really drill the message home.

Here is an illustration put together with our colleagues at EcoHealth Alliance that demonstrates some of the tremendous economic impact of infectious diseases over the past 15 years, where the **size of the bubble represents relative impact** and **the icons indicate in which sector these losses** are associated.

But it doesn't have to be like this. Recent analysis by some of our economists suggests that **global implementation of One Health systems would cost anywhere from \$1.9-\$3.4 billion per year**, which would include training, establishment of new One Health coordination centers, development of better surveillance and early warning systems, etc.

Yet the average return would be **\$37bn**, in terms of benefits from **enriched environmental and health systems through tourism dollars, increased productivity following from better health, healthier and more valuable livestock**, and so on.

So, what are we doing and how are we trying to solve some of these problems?

This is more or less the **accepted model for One Health** – and we are working within that, but we’re not doing everything.

Yesterday, in her talk on communication and social science Dr. Lapinski mentioned that One Health has somewhat of an **amorphous definition**. And our work is entirely consistent with that. We’ve had to mold the definition to fit our institutional constraints.

Fundamentally, **we do have investments that would touch on each area** of One Health engagement- food safety and security, water and sanitation, nutrition – etc. But have chosen to scope it **only to infectious disease**. This is because – 1. there is **demonstrated demand** and 2. it **makes sense** with the current **politics** and **professional expertise** in our departments.

I will let you read this– our **working definition**. You can see that we have all the requisite parts in there to give us **hooks** to develop One Health work in the future: **prevention, preparation, detection, response, and recovery**...all of which will help us engage with different groups within the Bank and with partners. **AMR** has also been highlighted both because it’s not an ID, but also because we believe it requires all the attention it can get.

So, what are we doing?

Well, we’ve spent the past 6 years developing this.

...which is **long-hand for One Health**. We have written it out to ensure that everyone really gets it. One Health may be well understood in this room, but its certainly **not at a global financing institution**.

So **what is it** and **what will it do**?

1. It is **educational**. It is a 200pp document that has been socialized and reviewed at WHO, OIE, FAO, ILRI, UNEP, CBD, and widely within the Bank. This exercise alone is perhaps worth it for the awareness building.
2. It lays out the **approach** to applying one health in WBG operations – **who is needed in the room, what are the investment options, what**

are the economic and development benefits, where we should be working and what types of projects are good candidates.

3. It is **political** - enabling governments and countries who already have a One Health perspective, to approach the institution for funding and support. This is not a “report” – it is an **operational framework** – a **blueprint for making investments** and working with clients; that’s an important distinction.

But what is in here?

Well, this.

Please **do not read it**; just look at the **headings**- as this will give you a flavor of some of the **resources available** in this document and some of what we’ve pulled together to help socialize these concepts and provide in-country teams with tools.

And **how will this work?**

Again, we don’t expect this program to fix all the infectious diseases in all the countries. Rather, we hope it to **add another level of protection** to work in concert with existing global programs.

This is illustrative, is not comprehensive, and there are perhaps better examples of global programs- but I hope it provides a sense of the overall idea. Essentially, **every global program has something to offer** and each works to **reduce disease threats** specific to its mandate. The One Health Framework that we’ve established does this as well by recommending interventions and providing tools to help **further diminish the risks**.

This means **different things at different levels** – for example at the global level it has to do with allocation of resources and convening of policy makers and experts; at the country level it has to do with the disbursement of funds and application of tools. In both instances it **enables solutions** for the folks who need to tackle infectious disease.

Before I finish up- let me just provide you with **two quick country examples** so you can see how this might work in motion.

1. Regional Disease Surveillance Systems Enhancement Project – which is a new project that aims to **strengthen disease surveillance** in countries of the Economic Community of West African States (ECOWAS). The project **was launched in 2016 after the Ebola** outbreak, building on the momentum associated with the response and recovery efforts.

The idea here is to **establish core country and regional capacities** to build resilient, broad-based disease surveillance and response system, based on inter-country collaboration and collective action. It's also a partnership that has included support from Gates, WHO, CDC, OIE, and others.

I can tell you also that it is a **real One Health effort** that involves **specialists across the spectrum** (ecology, public health, ID, disaster, climate) working together to shape the lending package and interventions that include things like **expanded access to training, laboratories for rapid diagnoses, cross-border containment, and early warning systems.**

Over the next several years, the project should disperse at least \$100m to achieve these outcomes.

2. Madagascar.

I was here **just on Friday** where we were conducting an **environmental health** analysis of **threats and opportunities** in the country- and **linking** that to WB investment. We wanted to **determine underlying drivers** of disease and **make recommendations for interventions** to address them.

Forgive this slide, which is **in French**- but this provides an **overview** of how this process worked.

Stage 1: Pre-diagnostic desk and data review – **exploring health system and others** – ag, environment, water

Stage 2: Workshops and meetings – **met with government partners** for consultations

Stage 3: Interviews and site visits – **ground-truthed** some of our efforts at hospitals and ministries

Stage 4: **Preparing the report**

Stage 5: **Presenting and validating** report findings and **recommendations** – final consultation

And in the process came up with more than **3 dozen recommendations** that will **directly link** to the WBG portfolio in country.

But then of course while we were there was an outbreak of this:

Latest numbers that I've seen are that there have been **343 people infected and have 42 died**.

There are normally about 400 cases of plague every year in the country. But this is different and we need to ask why. And we **need to be flexible as an institution and in the international community** to adjust our preparation and response.

EID events will continue to happen and we need to be **optimally prepared and responsive**.

And though there are many ways to do this, I think **drawing upon the tools** included under the **umbrella of One Health** is a **good start**.