PPP LAB
FOOD & WATER

Explorations 08

Financing and Public-Private Partnerships

in Water, Sanitation & Agri-Food sectors

Contents

Colophon

PPPLab Food & Water is a four-year action research and joint learning initiative (2014 - 2018) to explore the relevance, effectiveness, and quality of Dutch supported public-private partnerships (PPPs). PPPLab is commissioned by the Dutch Ministry of Foreign Affairs and is driven and implemented by a consortium of the Partnerships Resource Centre, Aqua for All, the Centre for Development Innovation at Wageningen UR and SNV Netherlands Development Organization.

This publication is a joint production between the PPPLab and Waste Foundation.

Comments and questions about this document are welcome. Please send them to: info@ppplab.org For more information, please visit our website: www.ppplab.org

Glossary

A short description of key concepts used in this exploration.

Investment: A generic financial term, referring to assets used to generate income, such as a machine in a factory. Investment can also have a broader meaning, as in 'foreign investments', were the term refers to private foreign money that flows into businesses in a country. In this exploration, the term refers to funds used for the SDGs.

Investing and financing: We use these terms as synonyms. The same is true for investor and financier.

Financing, funding, (re)payments: The first two of these terms can both refer to providing money to start activities, though financing can also be employed in the sense of 'money used to start activities', and funding can refer to 'money used to repay financing'. For example: investment in a water kiosk is **financed** with €1000, the repayment of which is **funded** with the payments from customers who buy the water. For sake of clarity, we will use the terms 'financing' and 'funding' to mean 'the provision of money to start activities', while (re)payments, revenue, and recovery will refer to 'money used to repay the financing'.

Public financing: financing provided by government (public) bodies or government agents. Its source is usually taxes, fees, or levies. Public financing is used to promote, develop or sustain a public good (such as roads, education, and health care) or a public interest (like promoting exports or encouraging innovation or the use of sustainable energy). The prime objective of public financiers is not financial, but improved service levels for citizens.

Commercial financing: In this document, refers to financing provided by private financiers on a repayable basis. A commercial financier has two objectives: 1) recovering the principal and 2) gaining a financial return that reflects the risk. Providing financing is the business of commercial financiers, the way they make money. This exploration predominantly takes the **perspective of the commercial financier**.

Impact investors: A group of commercial financiers willing to trade financial return for impact - that is, investors who are willing to accept lower financial returns if impact is created. Most impact investors are regular commercial financiers with a specific interest in sectors that create impact.

See also:

- https://ppplab.org/2016/11/insight-series-04-financing-public-private-partnerships/ for an explanation of innovative finance concepts relevant for PPPs.

Foreign direct investment (FDI): Direct investment from businesses to subsidiaries, or to other businesses in developing countries, which may contribute to achieving the SDGs and are thus a potential source of financing for SDGs. This exploration will focus on commercial financing only, and will not discuss FDI.

5

Figures used	Other	Annual in $ billions	Source
Total SDGS			
Investments needed total SDGs		5 000 - 7 000	a
Investments needed in developing countries		4 000	a
Investment met in developing countries		1 400	a
Investment gap in developing countries		2 500	a
ODA available total		142	a
SDG6 - Water and sanitation			
Investments needed for water		400	a
Investments needed in global water		1 000	b
Financing needed for SDG6		114	c
Other			
Costs doing nothing in water / sanitation		300 - 600	d
Available funding in capital markets		218 000	d
Return per USD 1 invested	4.3		e

Sources:

a http://www.undp.org/content/undp/en/home/librarypage/poverty-reduction/2030-agenda/financing-the-2030-agenda.html
b https://wwf.panda.org/our_work/water/?336390/Banking-on-private-finance-to-tackle-the-worlds-water-crisis
c http://www.worldbank.org/en/news/feature/2017/03/22/world-water-day-2017
d https://project1800.org/
e http://www.who.int/water_sanitation_health/monitoring/economics/en/

1. Introduction

1.1 Context

Whatever the idea or ambition, financing is needed to make it a reality. This also applies to SDG ambitions. If you have the ideas and the ambition, but you lack the funds, then the quest for funding starts. This is indeed a quest, because the process of identifying and convincing financiers can be long.

The SDGs may formulate the ambition, but the specific approaches that can make it happen and the financing that is needed remain question marks. Stakeholders in development may have approaches and business cases that scale, but nonetheless lack funding. The traditional source of funding, official development aid (ODA), amounts to about USD 142 billion per year, but USD 5–7 trillion is needed annually to meet all SDGs. If ODA funds do not increase, where will the remaining trillions come from?

Private investors are increasingly asked to take up a role and fill the gap. In some sectors, such as energy, the private sector is very active, but in the water and sanitation sector, the interest of private investors is limited. Why is this? Are private investors interested in financing these sectors? ODA funds also only provide a small part of the total funding; what is the role of ODA in financing SDGs? Is there a role for PPPs? If so, what is that role?

In this exploration, these questions will be addressed. The intended audience is mainly stakeholders from the development world - e.g., professionals working for or with governments, NGOs, and charities. These professionals are used to operating in a world where grant funding is provided for development projects, in which the project is successful if the agreed-upon results are delivered on time and within budget. This is quite different from the world of private investors. Private investors, or commercial investors, have a different perception of projects and PPPs, with a different language, different criteria, and different financing procedures. Bringing these worlds together begin with respect and a willingness to understand each other's perspective and language.

Processes related to grant funding are usually well understood by professionals in the development world. On the other hand, these professionals often have limited knowledge and understanding of the processes and decision making in the world of commercial financing. This document explores the world of commercial financing and its relation to PPPs, and provides ideas on how to combine public and private financing to further develop and scale activities in the water, sanitation sector and the food and agri sector.

Crucially, to spark the discussion, this exploration will discuss the financing of development projects (SDGs) primarily from the perspective of the commercial financier.

1.2 Key messages and structure

This exploration has two main sections: Part A covers the building blocks for commercial financing of SDGs, while Part B deals with commercial financing for PPPs in practice.

Part A is theoretical and discusses the basic concepts of commercial financing, while Part B is more practical and attempts to answer the question of how PPPs should be financed? However, the separation between these topics is not clear-cut, and similar issues may be discussed in both sections though from different angles.

To assist browsing through the document and jumping to specific subjects, here a summary of the contents using the key messages.

Part A: Building blocks for commercial financing of SDGs

- **The need for commercial financing:** Reaching the SDGs requires substantial inflow of commercial finance.
- Unlike grants, commercial financing must be repaid. All projects and businesses financed using commercial financing thus need to include **revenue mechanisms** that allow the financing to be repaid. Business models include revenue mechanisms by design, but structures that include results-based payment mechanisms offer interesting opportunities.
- **Need for bankable business propositions**. Private commercial money will need to be unlocked, but commercial finance only focuses on **bankable propositions.**

- **Impact investors** are commercial investors with a specific focus on creating impact. However, they still want their money back.
- Despite the urgency of the SDGs, commercial investors have **problems filling pipelines with projects** that fit their criteria. Compared to other sectors (e.g., energy, transport, and IT), the water, sanitation and food security sectors are not seen as attractive to commercial investors for various reasons; one important reason for this is their embedding in the public domain.
- **Risk:** In the food sector and water and sanitation sector, projects or businesses - especially when serving bottom-of-the-pyramid (BoP) markets - are generally not considered commercially viable, on account of the lack of a convincing and stable business case. Perceived high-risk elements include the poor having a limited ability to pay and government being unpredictable, and may regulate or interfere.
- **Some approaches that can overcome bottlenecks** for investments in the food and water sector targeting the poor are emerging and indicate the way forward:
  - **Service delivery models** that can scale.
  - **Partnerships** between private companies and governments - PPPs that are formally structured for commercial financing.
  - **Blended finance mechanisms,** whereby grants or public money are used to mobilize commercial financing.
- **In-country finance.** With economies in developing countries becoming stronger, in-country financing (both public and commercial) is becoming more important as source of financing, including for funding the SDGs.

Part B: Commercial financing for PPPs in practice

- SDG projects **compete for scarce private funding.** Commercial financiers prefer sectors other than water and sanitation.
- Previously grant funded PPPs are unlikely to acquire commercial financing.
- Financial instruments **blending** grants and commercial financing are emerging.
- Stakeholders - project owners, grant providers, and commercial financiers - need to work together, requiring a change of thinking and perhaps of mandates.

1.3 Exploration

This is an exploration that will not provide clear answers to a project specific issue. This is not a guide-book, a manual, or a PPP-financing handbook or checklist. No such book exists, because financing structures are always the result of (long) discussions and negotiations that are very case-specific and very context-specific.

This exploration began with the question of how to finance PPPs, including FDW/FDOV PPPs, using commercial funds. The answer is that it is highly unlikely that commercial investors are interested in financing such 'grant PPPs', even if they are successful in the eyes of their implementers and donors. The answer can be surprising to stakeholders, but it is obvious to commercial investors.

This question and its surprising answer point to the existence of two different worlds: the world of development and the world of commercial investment. This exploration tries to shed some light on these worlds, and specifically on the world of commercial investments, because the thinking there is unknown to many development practitioners. Considering the SDGs, it is very important that these worlds come together.

In an exploration, we can ask questions and try to answer them without evidence that our answers are correct. An exploration is neither guidebook nor a financing handbook. An exploration should create awareness and trigger thinking. This exploration is an introduction to financing SDGs that explores mobilizing financial resources other than ODA funds or charities. The thinking and terms of commercial investors are different. This exploration provides basic information, references for further reading, bold statements, and food for thought - and hopefully provides inspiration and courage to start discussions with commercial financiers. Good luck!

2. Part A: Building blocks for commercial financing of SDGs

2.1 Introduction

Finance is necessary to realize ideas. If we don't have funds ourselves, we must convince others who do to allocate them to our project. The owners of these funds - the financiers - are powerful, as they can shape the world through the conditions they set. Whether these financiers are public (e.g., governments) or private financiers, they will only finance projects that fit their criteria.

Financing is an old field and has developed its own terminology and jargon over the years. The process leading to the actual provision of finance is often fuzzy: even though many of the underlying documents contain numbers, deciding on whether to finance an activity is, to a large extent, irrational, for the simple reason that the decisions are based on estimates of events in the future. The numbers help to reduce or understand opportunities and risks, but in the end, financiers must make their best guess about what will happen in this future: Will the project succeed? Will the expected returns materialize? What might happen along the way to undermine the success of the project?

The financing process, especially with commercial financiers, takes a long time: it requires documentation, discussions, more documentation, and more discussions. Most of the process is about risk reduction.

This chapter starts with a short discussion of the basic concepts. The sections are short because most topics are already described in large numbers of articles that can provide more detailed information.

The first section is about the financing gap and the search for the trillions that are needed to finance the SDGs. The remainder of the chapter discusses the differences between grant financing and commercial financing, and the consequences for designing projects. The final section talks about blending the two sources of financing, grants and private financing.

2.2 The need for trillions

It is estimated that about USD 5–7 trillion is needed each year to meet the SDGs. The funds available from ODA amount to only USD 142 billion annually. Besides ODA, there are other development funds from governments, philanthropy, and remittances. The estimated investment gap for developing countries is USD 2.5 trillion per year, of which the need for investment in the water and sanitation sector is about USD 400 billion; in the agri sector, the gap is about USD 500 billion.

See:

- http://www.undp.org/content/undp/en/home/blog/2017/7/13/What-kind-of-blender-do-we-need-to-finance-the-SDGs-.html

How can this gap be closed? Where can these missing trillions come from, if not from ODA and charities? Private capital markets? It has been calculated that as little as 2% of the volume of the private capital market is sufficient for all SDGs. However, most of the private funds are locked on balance sheets for purposes other than the SDGs. An optimist will note that the money is there and the challenge is to change the allocation of only a small percentage of these funds.

Why are these private funds not already flowing to SDGs? Answering this question begins with looking at investment opportunities. Where are the interesting SDG propositions? Where are the models that are both scalable and bankable? When the development world meets the financing world, the development sector often stresses the lack of (and need for) funding for their projects: they argue that value is looking for money. The financing world argues the other way around, that there is a lack of (and need for) bankable projects: they argue that money is looking for value. How can these worlds be brought together? And related to this, how can philanthropy and ODA unlock private capital markets?

On a private level, investors judge investment proposals on their individual objectives: return, risk, and impact; they then decide whether a project is worth investing. On a higher, more public level, there are other financial considerations, including how to reduce the costs of doing nothing.

It has been estimated that not investing in SDG 6 results in an economic 'loss' ranging from USD 300 billion (in a positive scenario) to 600 billion (negative scenario) annually! Then there are the positive benefits on the public level: the WHO has calculated that every dollar investment in water and sanitation returns a value of USD 4.3 due to reduced health care costs for individuals and society, greater productivity, and so on[1].

To summarize:

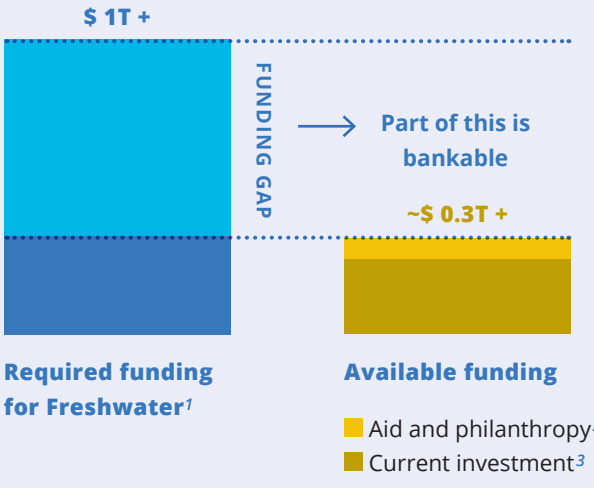
- about USD 5–7 trillion per year is needed to meet the SDGs;
- the annual missing USD 2.5 trillion is available in the capital markets, but is sitting there or being used for other purposes;
- for each year nothing is done, the public costs in the water sector alone are USD 300 – 600 billion per year.

Simple and straightforward? Absolutely not! Because a good deal of the investment is supposed to come from private investors, while the public level (government) enjoys the costs savings and the positive returns. To make this happen, the great challenge is to make these worlds meet.

WWF example

WWF provides an example of the above discussion. WWF has calculated that the funding need for water infrastructure (SDG 6) is higher than UNDP's estimate at USD 1 trillion annually. The figure below illustrates the funding gap of approximately 700 billion. If this gap is to be closed with annual commercial financing of USD 700 billion, then there must be bankable projects. WWF believes that (part of) the gap can be closed with 'bankable projects'.

Reaching SDG6 requires above $1 of investments in water infrastructure annually



- Address water pollution
- Manage excessive consumption
- Preserve ecology and environment
- Provide adequate, sustainable supplies for domestic, industrial and agricultural needs

Source: powerpoint WWF OECD Case Study, For Corporation and their financiers, water related, 2018

[1] Includes wastewater treatment facilities and water supply systems. Real need likely to be larger due to need in industrial and agricultural improvements related to freshwater as well as investment in ecosystem conservation [2] Estimated Freshwater related portion of aid and philanthropy (of $1T total); shown ratio as for ODA (~5%) [3] Investment in water related projects, excluding Hydropower Source: OECD, GWI, Hudson Institute

[1] *http://www.who.int/water_sanitation_health/monitoring/economics/en/*

2.3 Scaling and financing

The ambitions set by the SDGs are high: the need for scale in approaches (leaving no one behind) and the need to mobilize financial resources other than grants - of which commercial financing constitutes one of the largest untapped financial resources.

Why do few development projects scale? Lack of financing, of course. But could it also be due to the type of financing (grants) and the related conditions? Grant funding has dominated the development sector, not only in the supply of financing, but also in terms of the conditions that come with the financing. Could it be that grants are hampering scaling?

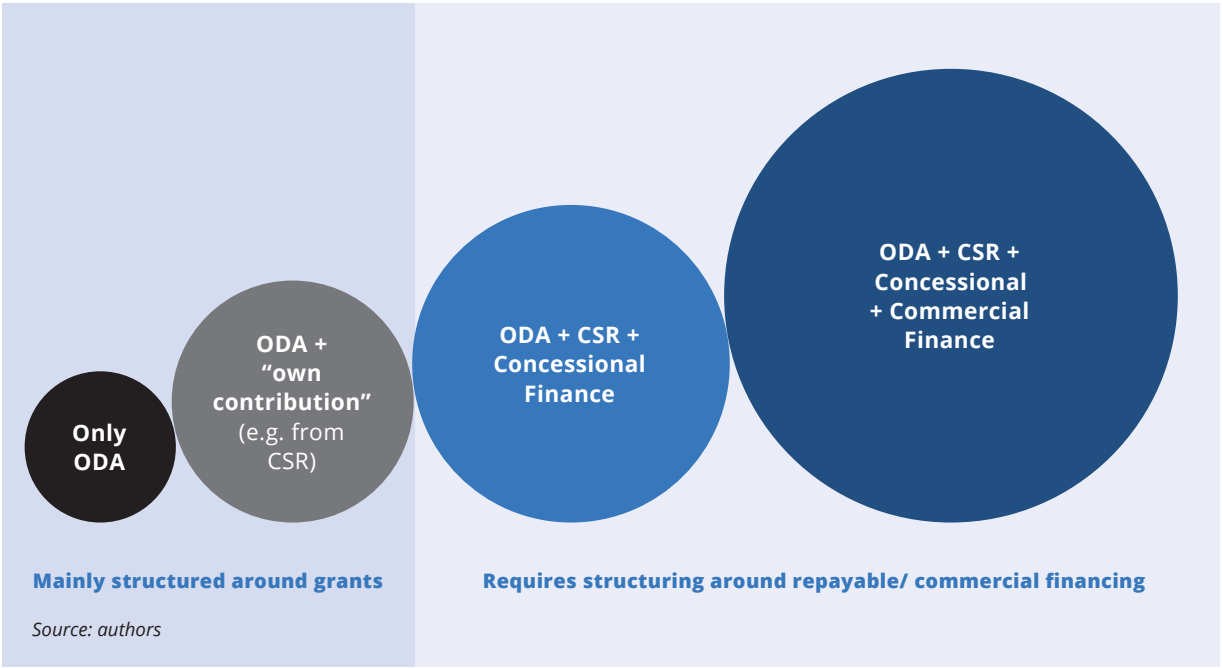
The graph below illustrates the changing realities: initially, development projects were fully financed by grants. The volume of financial resources increased over time as, next to ODA, other financial flows are added. For example, in FDW/FDOV projects, ODA is combined with 'own contributions'.

Money talks: projects are structured to fulfil the financier's conditions. As most development projects are currently grant financed, they are structured to please the grant provider. The turning point is when commercial financing comes to form a considerable part of the financing; these private financiers will then require projects to be structured in line with their needs. ODA and other grants can still play an important role when they are used, for example, building an enabling environment, providing technical assistance, de-risking, and closing affordability gaps.

But it is most important that, while grant financiers previously set the conditions for financing, commercial financiers will take the lead in setting conditions for structuring projects and their implementation. This has consequences for grant providers - for example: How can grants be combined with commercial financing? What influence comes with the grant? What are the risks (e.g., state aid and market)? what are the mandates? Is adaptation required?

Combining grants with commercial financing will increase the volume of available financing and is likely to open up new paths to scaling.

With commercial finance the "pie" will increase significantly



Source: authors

2.4 Grant financing versus commercial financing

11

Private sector involvement or commercial financing?

Many private sector players are already involved in development projects for a variety of reasons. Suppose there is an international business that is supporting a local consortium to construct toilets and build a sludge disposal and treatment facility in a community in Kenya. This international business may have the following reasons for doing this:

- Corporate social responsibility (CSR). In this case, the business finances the activities from their reserves in a CSR fund and the local consortium is the beneficiary. The source of the funds is the business reserve and the funds are provided as grants.
- Keeping human resources healthy. The international business has a local subsidiary with employees coming from the community. It is in the interest of the business to keep them healthy.
- Market development. The international business may wish to explore business opportunities in sanitation in Kenya and the project provides an opportunity to explore the market.

These are all examples of private sector involvement, but **none** of them are commercial financing. Commercial financing is provided by financial institutions, investors in the business of earning money by investing money. The business of commercial investors is to provide funds (the principal) and to earn a return (income) from that. In theory, commercial financiers can finance anything if they get their principal back, along with a decent return. In practice, commercial financiers will focus on specific themes or segments, as understanding the dynamics of a sector reduces their risks.

Impact investors are commercial investors who focus on segments or activities that can create impact. Like other commercial financiers, impact investors also want their principal back. Some impact investors are willing to soften the terms of their financing and to accept returns that are relatively low for the risk taken.

The difference between grant financing and commercial financing

A grant is money that is **given away**; grantors require an impact and do not want their money back. Commercial financing is **give back** money; the financing must be repaid to the financier. The world of commercial financing is thus very different from the world of grant money (as in the development world), and this has an important consequence. To attract commercial financing, the project or business must be **structured** in such a way that the financing can be repaid. Only then will commercial financiers be interested and willing to discuss.

If commercial financing needs to be repaid, then the project must have a **revenue-generating mechanism** or **revenue model.** A business case always includes a **revenue-generating mechanism**. However, in SDG projects and activities for the public good, in particular, there are revenue models that do not require a business case. In a previous section, we mentioned that the returns on investments in SDGs are often enjoyed by the public sector; these returns can then be transferred to the investor - for example, in the form of outcome payments or carbon credits. An example comes from India, where the government pays for every toilet that is constructed.[2] The next sections will discuss various revenue-generating mechanisms.

Grant providers and providers of commercial financing

Who are the grant providers who give money away, and who are the commercial financiers that require their money back, with an extra return? Most likely, grant providers are public entities and the commercial financiers are private entities. But this is not as clear-cut as it seems.

There are very large private entities that provide grants - charities like the Bill & Melinda Gates Foundation, privately owned lotteries like the Postcode Loterij, and private-sector players financing from their CSR. Then there are public entities that may provide repayable financing.

[2] *https://sbm.gov.in/sbmdashboard/IHHL.aspx and http://swachhbharaturban.gov.in/ihhl/*

Often, they do this because private sector financiers find the segment too risky, especially in innovations, start-ups, and renewable energy, such as windmills. Often when the business case has proven itself, the government will pull out and private sector financiers take over.

Then there are financial instruments that have the characteristics of both commercial funding (need to be repaid) and a grant (a gift). For example, 'recoverable grants', in which financing is provided and has to be repaid only if the business generates sufficient revenues; otherwise the repayment is waived.

Below is an overview of players and financing instruments.

Types of financing for public and private entities, examples

Financial instruments	Public entity	Private entity
Grants (gift, nonrepayable)	• Subsidies (e.g., ODA) • Results-based payments	• Philanthropy • Results-based payments • Crowdfunding (grants) • Corporate social responsibility (CSR)
Grant (repayable)	• Recoverable grants (e.g., loans for innovation)	• Recoverable grant
Repayable finance	Concessional finance (with soft conditions - e.g., reduced interest rates) • Loan • Guarantees • Insurance for currency exchange or for country-risk • ...	**Commercial financing** in the form of: • Debt • Equity • Crowdfunding (debt) • Microfinance • Impact investments • ... *Note: The perspective of this exploration is that of commercial financiers - the Private entity/Repayable finance cell in the table.*

2.5 Public finance: Considerations and conditions

13

Objectives

From the general responsibility of the government to promote general welfare, many other roles can be derived, including the duty to ensure availability of basic goods such as food, water and sanitation, education, healthcare, roads, etc. Many governments in developing countries fail to deliver because financing is scarce, because capabilities are lacking, or for many other reasons. The SDGs all contribute to these public responsibilities.

Economic and Social returns

An earlier section mentioned that the cost of no action or water and sanitation is USD 300 – 600 billion per year, and that there would be a return of USD 4.3 for every dollar invested in the water sector. If this return on investment can be realised, why is it not happening? The reason is that on a **public** level these returns are valuations only that are not directly related to real money. Commonly used indicators to estimate or value the return on public investments are eIRR (the economic internal rate of return) and SROI (the social return on investment).

An indicator for **private** investors is the fIRR or financial Internal Rate of Return. A simple example is the interest rate on a savings account: if the interest rate is 3%, the fIRR is 3% and every year real money is added to the savings account. This is different for **public** investments. Every USD invested on a public level, e.g. in health care, education, roads, generates a return, but it is less tangible than the interest rate paid on savings accounts. To be able to rationalise and justify the investments on a **public** level, often indicators like eIRR (economice Internal Rate of Return) and SROI (Social Return on Investment) are used.

For example an eIRR (economic Internal Rate of Return) of 10% means that every 1 USD invested has an estimated 10% economic return. This eIRR refers to a 10% growth of economy, caused by e.g. increased productivity due to ,for example, healthier people (because of investments in healthcare), better educated people (investment in education), better logistics (investments in railways). But what is the value of the increased productivity of healthier person, or a better educated person?

Over the years public investments have proven to increase economic growth. Based on this eonomists have developed estimates or proxies to value a healthier person or a better educated person, sometimes also called shadow-prices. Regardless, indications for a return on public level is an estimated valuation. The challenge is to translate these valuations into real money. This will interest commercial investors (who are mainly interested in fIRR).

The SROI, Social Return on Investments has similar characteristics as the eIRR. The SROI is a method to measure and monetarise social returns.

Follow the real (!) money

Recognizing the difference between long term returns (like eIRR) and short term returns (like fIRR) is important. **Developed countries** have already invested and continue to invest money in functioning infrastructure like health care, education, road and these countries enjoy the economic benefits in the form of a healthy GDP. Some new investments may be done to **increase efficiencies** of the infrastructure and thus save money. The returns of these investments on efficiency may lead to immediate savings: less money spent. This is interesting territory for commercial investors as they may be willing to invest in efficiency and earn from the savings (real money).

Developing countries often do not have the infrastructure yet. They are still at the phase that they have to invest and that the return may only manifest itself on the long term in the form of economic return / growth of GDP. Arguments like 'every 1 USD invested in water and sanitation will generate a return of 4.3' relate to longer term benefits for the economy. This is a much more difficult area for commercial investors as there is no clear revenue (real money) for them. However, interesting models have emerged e.g. outcome payment models whereby a government or an outcome payer may be be willing to pay services. A good example is Swachh Bharat Abhiyan in India whereby the government is paying for every toilets realised.

As mentioned earlier, the benefits of investment in

SDGs are enjoyed on the public level. The challenge is to encourage the government (or other like-minded organizations, such as donors) to translate these benefits in payment for results - for example to expand the safe water supply, to increase the number of toilets, or to reduce CO2 emissions. This willingness to pay for results will trigger new service delivery approaches, including commercial financing. Consider a client who is willing to pay for certain service - in this case, the client is a government (or outcome payer) and the services are SDG-related achievements.

Various organizations try to monetize economic benefits and costs - e.g., Trueprice.

See these links for organizations and activities:

- https://en.wikipedia.org/wiki/Carbon_credit
- http://trueprice.org/businesses-and-financial-institutions/what-do-we-do/true-price/
- https://www.copenhagenconsensus.com/

Structure and scaling

Governments and grant providers prefer to finance projects rather than businesses/ organisations. Usually, a PPP project in the development sector is implemented through a contingent coalition without a specific legal entity, and the main financing comes from subsidies. The grant provider usually requires a lead partner, but that is mainly for administrative reasons. In such contracts, risk and accountability trickle down from the lead partners to the other partners in the consortium (e.g., FDW and FDOV). These PPPs are not suitable for financing by commercial financiers.

Projects and PPPs financed by grants are structured for grants and have different characteristics than projects and PPPs that are financed by commercial financiers. In addition, although donors communicate the importance of scaling, these grant structures are difficult to scale (see the next section).

On scaling mechanisms, see:

- https://ppplab.org/wp/wp-content/uploads/2017/11/PPPLab-Series-06.pdf

2.6 Commercial financing: Considerations and conditions

Objectives

Commercial financiers will always thoroughly assess any project or business before investing. A commercial investor simply wants
1) to put his or her money to work in a segment that is understood,
2) to get the initial investment back, and 3) to receive a financial return that reflects the risk or - in the case of certain impact investors - a combination of return and impact.

All the considerations and conditions described below are derived from these starting principles.

Ownership

Ownership! This is one of the key issues for commercial financiers. *Who* exactly will receive the commercial financing? Who will run the business? And who is responsible for repayment? Ownership has two dimensions: the legal entity and the people behind the entity. If ownership is well organized and legal, and if the people have a good track record and reputation, the chances of repayment are high.

Grant providers also require ownership, but on a different level than commercial financiers. Companies are usually well structured, registered legal entities. Projects, however, are occasional structures that can take many shapes and may have fuzzy ownership. This lack of ownership and structure means that commercial financiers are not interested in financing projects, unless the project is structured in such a way that the drawbacks are overcome. A common way to structure a project for commercial financing is to set up a special purpose vehicle (SPV) - a special company to deliver the project. Founding an SPV can be complicated and time-consuming; it involves setting up a custom-made business entity involving several project partners, a variety of interests, and high risks which are also not always easy to identify. But in the end, an SPV that is registered will have a clear ownership structure and agreements will describe which party is responsible for which risk. From the perspective of commercial financiers, a PPP is a project and can only be financed if it is incorporated in the form of an SPV or other legal entity.

Revenue (recovery) models

Commercial financing must be repaid. How can this be done? The revenue mechanisms will depend on the type of business: in a project, the financing is repaid from the cash flows generated in the project; in a business, revenue can come from multiple activities and the financing is repaid from the overall income generated in the business.

Revenues can come in many forms - such as fees (people paying for a product or service), outcome payments (e.g. a donor paying for water taps being installed and operational), or credits (e.g. for reduction of carbon emissions).

Project finance versus business (corporate) finance

Commercial financiers clearly distinguish between 'project financing' and 'business financing'. Banks, for example, have different departments: a project finance department and a separate corporate finance department.

The key difference is related to the risk profile and financing structure. A **project** is set up with a clear objective and has a **finite horizon** that matches the lifetime of the project. In a project, the debt will thus be repaid from the cash flow generated within the project (such as from a mandate to collect fees on a toll road for twenty years). To ensure clear ownership, the project must be structured as an SPV. At the end of the lifetime of successful SPV, the services have been delivered, the financing has been repaid, and a decent return has been earned. In the vocabulary of commercial investors, concepts like 'growth' and 'scaling' are not related to projects. In projects, the agreed upon services are delivered, and then it is over.

A business can have many activities and the legal entity has an **indefinite horizon**. Often a business can be financed against the balance sheet and the overall capacity of the business to repay. Financiers may finance a specific project in a business, such as a machine, but then they may require repayment from revenues earned with that machine, and they will register the asset as collateral. A business is set up to grow and scale.

See:

- https://en.wikipedia.org/wiki/Corporate_finance
- https://www.investopedia.com/terms/d/death-valley-curve.asp

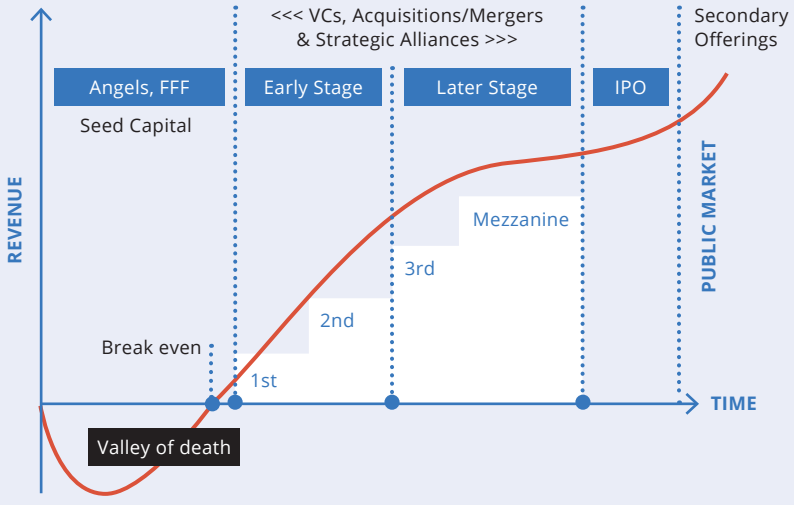
See for project finance:

- https://youssef-serghini.weebly.com/project-finance-for-dummies.html

Business financing, financing growth

Fast growth is risky. While investments are needed to finance the growth (e.g., additional machines, more personnel), it will take time before these investments start generating revenues. This is the 'valley of death': the phase where debt increases and ability to repay financiers is limited.

Financing a business-valley of death
Startup Financing Cycle



Source: https://tapmiblogs.wordpress.com/tag/startup-financing-cycle/

Risks

Investors generally prefer lower risks with lower returns to higher risks with higher returns: above all, they want their money back. This also holds for impact investors, who are first and foremost investors and therefore want their money back.

Risks exists on various levels - such as sector risks, project risks, business risks, country risks, political risks, and currency risks. While grant funders want progress reports in order to understand if the objectives will be met, commercial funders require documentation to understand whether risks have increased or reduced.

Risk is big business. There are companies insuring currency risks, country risks, and other risks. Obviously, any risk that is insured adds to the cost of financing. Then there are companies that specialize in mapping the risks of a specific business, a specific sector, a specific country. These agencies (such as Moody's, Fitch, and local agencies) map risks and provide credit ratings. Recently, a rating agency called GEMS has been established, focusing specifically on nondeveloped markets.

See:
- http://www.gems-riskdatabase.org/

Structuring for commercial financing is all about risk management. Business financing is relatively easy as the business is in place and generating revenues. Structuring an SPV for commercial financing is complex and may take one or two years; it is therefore costly. These efforts are worthwhile for large PPPs only, such as those with an investment need of at least USD 20–30 million.

See:
- https://ppp.worldbank.org/public-private-partnership/financing/government-risk-management

Financing instruments

The decision on the actual financing instruments will be made when all other issues have been well understood and arranged. The financing package may include equity, loans, subordinated loans, working capital, and letters of guarantee, and each type of financing may come with its own contract.

Various financing instruments are described in publications of PPPLab and others:
- https://corporatefinanceinstitute.com/resources/knowledge/finance/
- https://ppplab.org/topic/finance/
- https://ppplab.org/2018/07/3552/

2.7 Financing for SDGs: Blending public and commercial financing

This section will discuss the combination of grant funding and commercial financing, the opportunities, and current instruments.

Grants

Public entities and charities provide grants which the beneficiaries are not expected to repay. Grant money is 'consumed'. Over the years, the thinking on how to use grants has developed and donors (grantors) have adapted their conditions accordingly. For example, in the past grants were commonly used to pay (make input payments) for development activities like training, establishing infrastructure, lobbying, advocacy; however, nowadays there is awareness among donors that grants only are not enough to solve development issues.

There is a growing interest in alternative uses of grants - and specifically in using grant money to mobilize commercial money. An indicator for the success of using grant money is 'leverage', or the quantity of commercial funds mobilized for every grant euro or dollar invested.

The new 'flavours' of using grant money include:

- Results-based grants can range from process-focused (input payments) to more result-focused (results-based payments). Examples include:
  - results-based payments (more explanation below);
  - impact bonds;
  - credits, such as carbon credits.
- Risk-reduction: Here the focus is on using grant money to reduce risks to a level that is comfortable for a commercial investor to step in. Examples include:
  - first loss reduction;
  - guarantees;
  - grants to build an enabling environment, thus reducing commercial risks.

See:

- https://en.wikipedia.org/wiki/Grant_(money)

Blended financing

Blended finance is a term used to describe financing structures that combine grants and commercial financing. A blended financing structure can take many forms and is the result of negotiations between commercial financiers and donors.

These new grant instruments, whether results-based payments or a risk-reduction approach, enable a great variety of blended finance structures. Commercial financiers have an equally large box of financial instruments. If there is a project with a good potential to deliver both impact and financial returns, a blended financing structure may be possible. All that is needed is interested grantors and commercial investors with a clear will to make it work.

Note that 'blended finance' is not a financing instrument, but rather a concept indicating the need to bring public and private funding sources together. Also 'blended' does not mean that various financing sources are 'shaken and stirred' in some kind of financing cocktail.

As we discussed above, each financier has his or her very clear conditions. Therefore, a blended financing structure is built up layer-by-layer, with each layer reflecting the financing from one specific financier, accompanied by the conditions for repayment (in the case of a commercial financier) or impact.

More on blended finance:

- http://www3.weforum.org/docs/WEF_Blended_Finance_A_Primer_Development_Finance_Philanthropic_Funders_report_2015.pdf

Results-based payments

Results-based financing (RBF), also called performance-based financing, is relatively new. RBF grants are paid after the delivery of pre-agreed and verified results. Output and outcome payments are also a form of RBF.

The term results-based financing may be confusing, as the approach involves payments after service delivery rather than financing before. For example, RBF can be used to cover affordability gaps, where a customer pays 60% of the price of installation of a water tap and the remaining part is covered by the results-based payments. In a financing structure, the customer payments and the RBF payment are only recovery mechanisms. The financing must still be arranged. However, when recovery (repayment)

is secured, it will help to find commercial investors who will provide the financing.

Result-based/Output/outcome payers can be public entities, charities, or any stakeholder interested in paying for a specified output or outcome. An example of an output payer might be a flower grower who is willing to make monthly payments for recovered wetlands in the area. Another reason could to protect a business resource, in the form of water. The most common and best-known form of outcome payment is carbon credits (more explanation below).

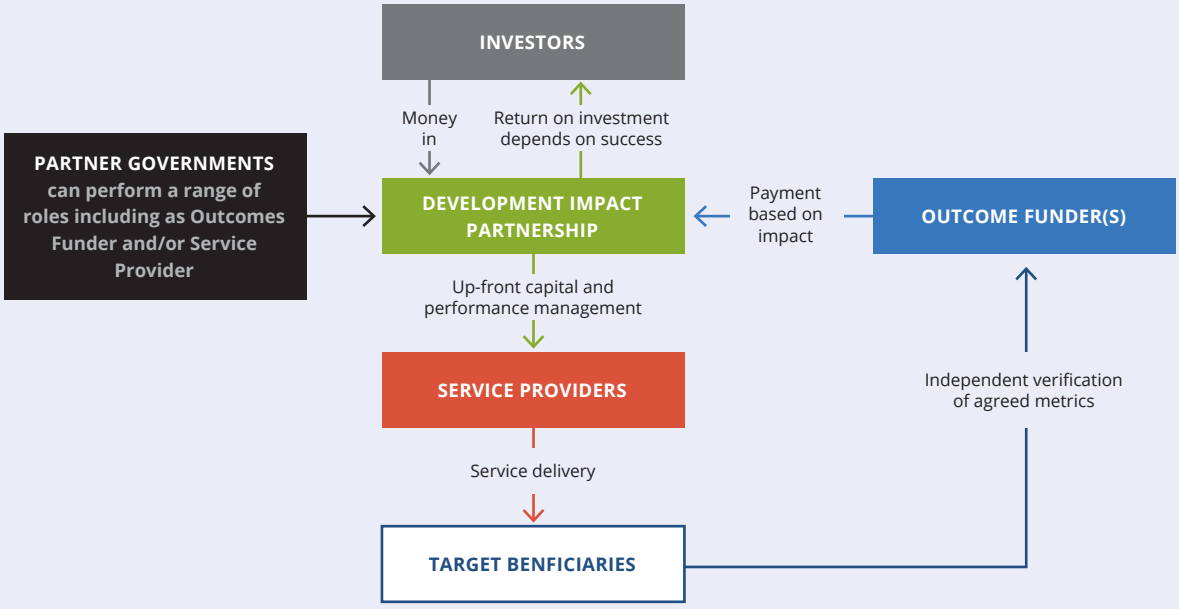
See:

- http://www.gpoba.org/
- https://www.sida.se/contentassets/1b13c3b7a75947a2a4487e2b0f61267c/18235.pdf

Impact Bonds

The term "bond" refers to a relatively safe financial product with carefully calculated risks and andreturns, and therefore a preferred product for investors that seek fixed income . In recent years a new type of bond was developed, the impact bond. Impact bonds blend impact investing, results-based financing, and public private partnerships. In an impact bond, private investors provide up-front capital for social services and are repaid by an outcome funder if the agreed-upon results are achieved. In the case of a social impact bond (SIB), the outcome funder is a government entity. In the case of a development impact bond (DIB), where 'development' refers to an application in low-income or middle-income countries, the funder is usually a third party, such as a donor or foundation (Center for Global Development and Social Finance, 2013).

SIBS and DIBs are relatively new instruments and experience of them is limited. As with all results-based payment instruments, their design, negotiation, and contracting are complicated processes, which lead to high development costs. These costs increase if the country is high risk. Like other result-based instruments, impact bonds have potential advantages: drive performance management, incentivize collaboration, build a culture of M&E, and reduce risk for government.



Source: Savekoff et al 2015 https://www.brookings.edu/wp-content/uploads/2017/09/impact-bonds-in-developing-countries_web.pdf

TYPICALLY AN INTERMEDIARY WILL BRING TOGETHER PARTIES TO FORM A DIB

19

Green bonds and blue bonds are not impact bonds (with an outcome payer) , but traditional bonds: green bonds finance earmarked for projects that have positive environmental or climate benefits, while blue bonds benefit the water sector. As an example, the World Bank Green Bond raises funds from fixed income investors to support World Bank lending for projects that seek to mitigate climate change or help affected people adapt to it. The Green Bond market has grown quickly, also opening opportunities for well-structured PPPs. Since 2008, the World Bank has issued nearly USD 11 billion equivalent in Green Bonds, through more than 145 transactions in 19 currencies.

See:

- http://treasury.worldbank.org/en/about/unit/treasury/ibrd/ibrd-green-bonds

Credits

Some desired outputs are standardized; these outputs can be described in a common language, can be measured, have a price, and can be traded. These output are 'credits'. Carbon credits are the best-known example: All sort of interventions that directly or indirectly lead towards a reduction of carbon dioxide emissions can be certified (e.g. by the Gold Standard) and, once the CO2 reduction contribution has been determined (as tons of CO2), credits can be traded on the carbon credit markets. Other types of credits are being developed. Organizations such as the Gold Standard Foundation are developing credits and standards.

See:

- https://www.goldstandard.org/our-work/what-we-do

Credits are a noteworthy attempt to monetize 'externalities'. For example, activities that reduce CO2 emissions can generate revenues from carbon credits. However, like RBF schemes, credit income is not a financing instrument, but rather a recovery mechanism. The activities generating carbon credits still require financing.

2.8 Main points

- Financing is complex; designing a financing structure acceptable to all stakeholders takes time.
- In financing SDGs, impact is a given and is nondiscriminatory. The challenge is the bankable proposal.
- Commercial financiers only finance entities that have a clear ownership. This is self-evident for businesses but not for projects. Projects should be structured, for example, into SPVs that can then attract commercial finance.
- Economic returns and social rate of return are useful indicators that public financiers and social impact investors use to weigh the impact of projects.
- Blended finance is a delicate structure of layers of financing, and not a cocktail of funds that is 'shaken or stirred'. If used well, blended finance can be instrumental allowing donor money to unlock private capital markets for the SDGs.

3. Part B: Commercial financing for PPPs in practice

3.1 Introduction

This section is practical. While Part A discussed the need for commercial financing and the consequences thereof, this section applies these principles to the financing of PPPs. Why PPPs again? Because the Dutch FDOV and FDW PPP programs triggered this exploration and specifically the question of how to scale and finance the successful PPPs emerging from them.

In practical terms: how can successful FDOV/FDW PPPs attract financing to continue and scale? And as discussed in the previous section, a large part of the required financing will most likely come from commercial financiers. The PPP, or the appropriate legal form, must therefore fulfil the conditions of this type of financier.

Commercial financing is scarce and the financiers are selective. This section thus begins with a discussion of the competition for commercial financing. What is the position of the water and sanitation sector and the food sector within the SDGs? How interested are commercial financiers? If there is interest, what are the conditions? What is needed for an FDOV/FDW PPP to obtain commercial financing? There are important differences between PPPs structured for grants (as in the Dutch PPP program) and PPPs that are considered bankable by commercial financiers. This issue is discussed in Section 3.3.

Section 3.4 dwells on financial instruments. This section is short, as most of the instruments have already been discussed in Section A.

This section ends with considerations on the next steps. What needs to happen for FDOV/FDW PPPs? How can the Dutch PPP program and public financing contribute to this? This is a broad invitation to start doing things differently to find out what works and what does not.

3.2 Financing the SDGs

The competition for financing

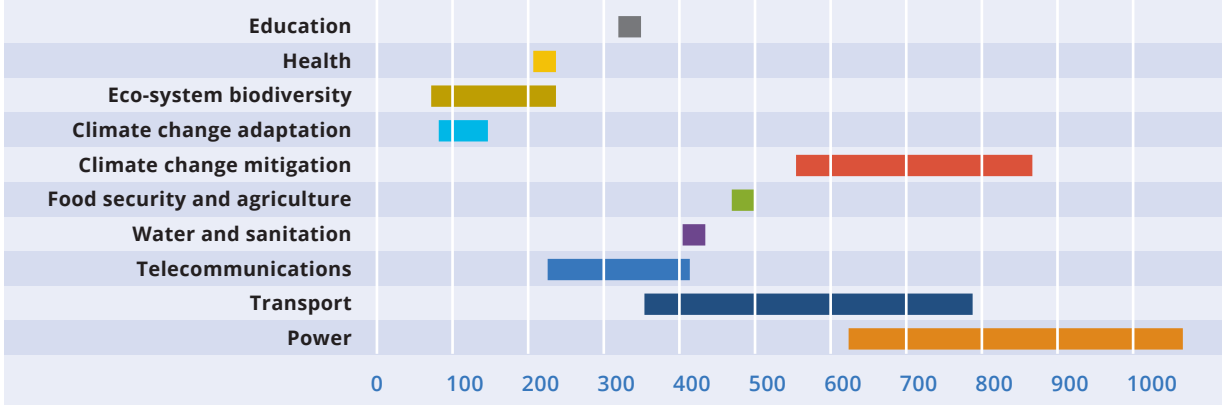
All data in this section are taken from the UNDP 2030 guidebook

- http://www.undp.org/content/undp/en/home/librarypage/poverty-reduction/2030-agenda/financing-the-2030-agenda.html

The estimated annual investment requirements for all SDGs is estimated at USD 5–7 trillion per year. UNDP has made an overview of the core sectors.

In the power, transport, and climate change sectors, the estimated financing need is broadly high. These are all sectors that require capital-intensive infrastructure. The estimated annual investment for the water and sanitation sector and the agri sector are more precise at, respectively, around USD 400 billion and USD 500 billion per annum. (Note that figures may differ depending on scope. E.g. the World Wide Fund for Nature (WWF) has calculated the financing needs for water and infrastructure at USD 1,000 billion per year.) If investment needs in the water and food sector cannot be met with grant funds alone what are the other sources of financing?

Estimated Annual Investment Requirements, Core SDG Sectors (US$ billions)



Source: UNDP calculations based on UNCTAD, World Investment Report 2014

Sources of financing

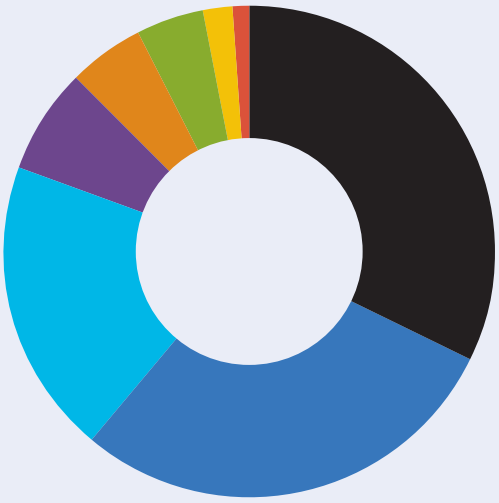
First, there is the SDG financing need of USD 5–7 trillion per annum. Then there is capital already flowing to development countries. In the UNDP's figure below, this is about USD 2 trillion. It is important to note that this is an indication of the **total** capital flows: it includes funds related to SDGs, as well as other funds. In addition, this picture shows only **international** capital flows; there are also **national** capital flows.

This local financing for SDGs is usually relatively small. Before discussing how to increase the capital flow, let us look at the current flows. What are the sources of the current international capital flows?

Briefly, the categories (which are also relevant for the agri, water, and sanitation sectors) are:

- **FDI** (USD 646 billion): Foreign direct investment generally take place when an investor establishes a foreign business operation or acquires foreign business assets. In the framework of the SDGs, this is private financing; for example, a water company setting up operations in a developing country.
- **Bonds** (USD 102 billion): In Treasury Bonds or T-bonds, investors lend money to the government. The government thus gains access to this money and become in debt for it. This is public financing which can be allocated to the SDGs, including agri and water sectors under the government budget.
- **Remittances:** USD 575 billion is yearly remitted by migrants to their country of origin. Remittances are usually stable money flows. This is a potential source of financing, but is money from households and cannot be accessed through regular financing principles. However a study on remittances concluded that villages maybe 'money-rich, but development-poor' and remitters are willing to invest in development of their homeland. See: http://www.eib.org/attachments/country/femip_workers_remittances_en.pdf http://www.worldbank.org/en/topic/migrationremittancesdiasporaissues/overview
- **ODA** (USD 142 billion) and Private aid flows (USD 88 billion) yield a total potential of around USD 230 billion for grants.
- **Commercial banks and other investments** receive around USD 385 billion yearly. These are interesting private local financing resources to tap into.

International Capital Flows: Developing Countries (2016)



US$ billion, 2016

- **FDI inflows** 646,030
- **Remittances** 575,191
- **Commercial banks and other investments** 385,649
- **ODA** 142,600
- **Bonds** 102,646
- **Private aid flows** 88,000
- **Portfolio Equity inflows** 41,711
- **South South Cooperation** 20,000

Source: United Nations Development Programme, Financing the 2030 Agenda: An Introductory Guidebook. http://www.undp.org/content/sdfinance/en/home.html

In summary, taking 2016 as an example, the sources of funding already flowing to developing countries are:

- Grant-like financing (ODA, private aid) of around USD 233 billion
- Commercial finance resources (commercial banks, bonds) of USD 487 billion
- Business resources (FDI) of USD 646 billion
- household resources (remittances) of USD 575 billion

Where does the money go to? Again, there is no one-to-one connection between the figures in this section; the figures provide an overall idea of where the money is coming from and how it is used. For example, the picture below only shows private funds mobilized through blended finance, in which the blending is an indication that the funds are mobilized for impact. However, certain funds like FDI may not be linked to blended finance, and therefore are neglected in this figure.

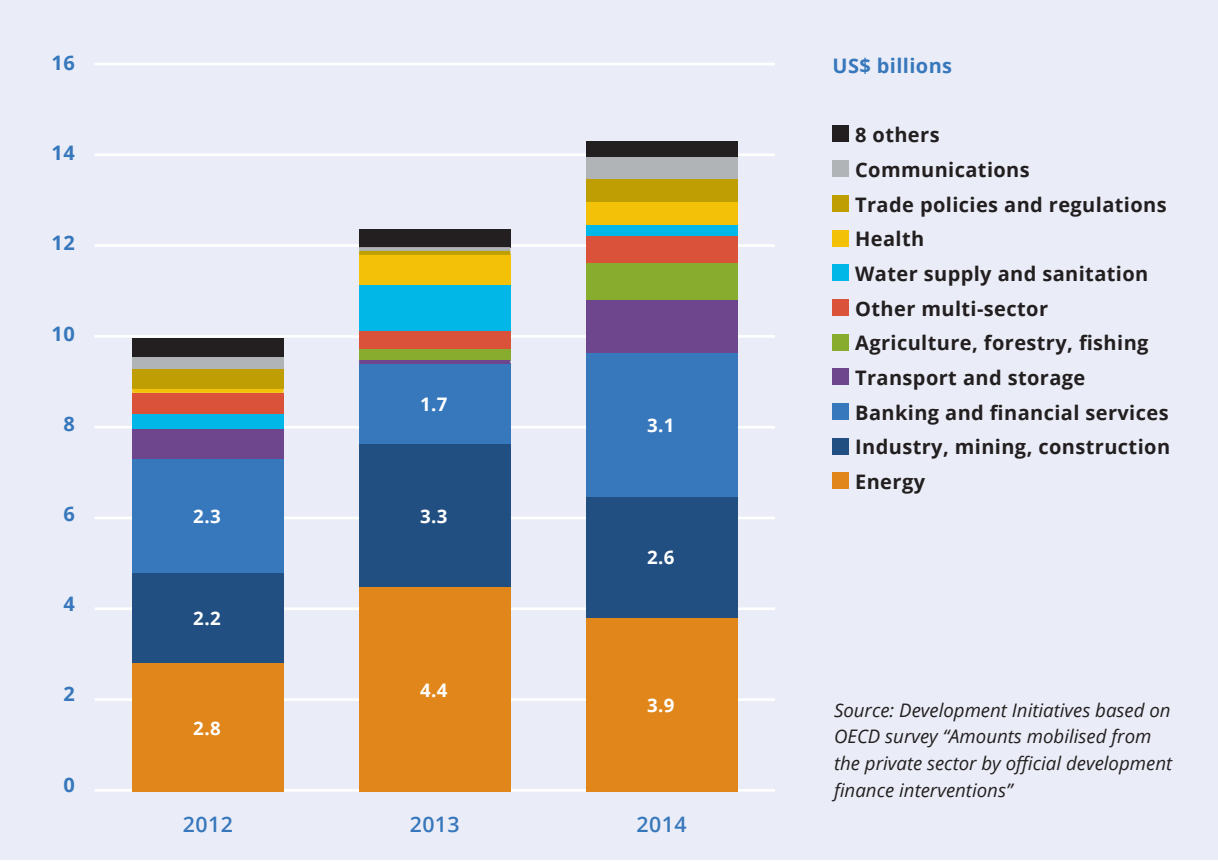
More specifically, which impact sectors are most attractive to investors? According to the OECD, the energy sector has been most popular for some years, followed by industry and the banking sector. Actual investments in the agri sector are relatively small but increasing, while the water and sanitation sector had a revival in 2013 and then decreased.

See:

- https://oecd-development-matters.org/2016/11/24/what-does-the-evidence-on-blended-finance-tell-us-about-its-potential-to-fill-the-sdg-funding-gap/
- http://www.sdgfund.org/finding-pipeline-project-preparation-sustainable-development

These are not current data, but there is little indication that the investment appetite of investors has shifted. Why have investors favoured other sectors? What is there to learn for the agri and water sector?

Infrastructure and productive sectors receive most private finance mobilised through blended finance



Source: Development Initiatives based on OECD survey "Amounts mobilised from the private sector by official development finance interventions"

Box 3.1: Reducing financing needs and information technology

What if the financing gap for SDGs can be reduced? Everyday information technology, in the form of smartphones, provides some interesting opportunities.

Consider an investment in a multimillion-dollar infrastructure, such as piped water system. This system begins to generate revenues only once the system is fully up and running. However, small scale investments, such as in nonpiped water and sanitation services, could be recovered in days or weeks. Whereas previously it could take months before fees were collected door-to-door and paid to the operator, nowadays mobile money, payment systems on water meters, and other technology allow for almost instant payment. Such payments mechanisms are developing quickly - for example, agri-wallets, pay-as-you-use solar energy, and pay-as-you-grow in agriculture. Block chain technology also has the potential to boost markets for small instant digital payments.

Many of these technologies are being used in the energy sector and have not yet found their way to the water and sanitation and food sectors. But when they do, the financing gap may be reduced, simply because payments can be collected much faster. Promising technologies, especially for SDG services that do not require large upfront investments in infrastructure, may benefit from investing in (almost) instant recovery mechanisms.

See:
- A financing and payment system for farmers: https://agri-wallet.com/
- A similar system in health care: https://www.pharmaccess.org/update/m-tiba-mobile-health-wallet-featured-on-dutch-national-news/

3.3 Money looking for impact?

There is a massive financing gap to be filled if the SDGs are to be achieved. In the previous chapter, the SDG financing gap was calculated as USD 2.6 trillion per annum.. Depending on the source and starting assumptions, the figures can differ, be debated, and are not easy to reconcile. Nonetheless, the overall picture is that at least hundreds of billions of dollars are needed for agri and water and sanitation projects, but that commercial financiers prefer other sectors. The concepts discussed in Section A can help to understand this difference in appetite.

Objective. Regardless of sector, all investments in SDG sectors will create impact. Objective is therefore not a strong discriminating argument. Some scholars have made attempts to rate the SDGs by their value for money, but such rankings seem more relevant for public stakeholders in setting priority sectors. For commercial financiers, investments in SDGs are all impact investments.

- https://www.copenhagenconsensus.com/post-2015-consensus/nobel-laureates-guide-smarter-global-targets-2030

Revenue model. Do the sectors (e.g. energy) that are favoured by commercial financiers offer more attractive revenue models? Interestingly, in the water and sanitation sectors too, investments flow mostly to piped infrastructure, with less going to on-site solutions.

One key question is: Can convincing revenue models be developed in the food and water and sanitation sectors? Also, why are investments in piped infrastructure preferred in the water and sanitation sector? Few investments flow towards poor areas. Why is this the case, if it leaves so many people unserved? Is it because people living in these areas cannot afford to pay? In recent years, it has become clear that the poor pay more for basic services than the rich: it can be 'expensive to be poor' (e.g., water in sachets is more expensive than water from a tap). Also, several new approaches have shown that people in poor communities are willing and able to pay (as, for example, in the FDW FINISH sanitation project). The challenge is to develop revenue models that provide the reassurance that that repayments will be made while also allowing for scaling.

Structuring. Ownership is a key condition for commercial financiers. The favourite sectors for commercial financiers are sectors with clear revenue models and clear ownership (energy, industry, and banking). But ownership is an issue in water and sanitation. The sector is dominated by utilities (often related to government)that mainly serve the urban rich and by NGOs who serve the urban and rural poor. In short, few are structured for absorb commercial financing.

Risks. The risks in the water and sanitation sector are high. Governments and political parties constitute the main risk, as they tend to intervene in the tariffs set for basic services like water.

This is only a summary of factors that can hampering the inflow of commercial financing in non-piped water and sanitation. The observation is that investors who want to contribute to impact have more attractive sectors to invest in, because sectors such as the energy sector, have a more attractive revenue model and there seems to be less risk of government interventions in them. Results-based payment mechanisms may offer opportunities to reduce the unpredictability of governments, as the government will be a stakeholder, will be involved in defining the results, and will therefore commit to pay for the results.

Financing PPPs

As we mentioned, commercial financing has already begun flowing towards SDG projects and businesses. So far, its volume is only a few hundred billion only (estimated at 400 billion), while the yearly gap is 2.5– 3 trillion. So the available financing is not enough and, on top of that, it seems to flow to sectors with obvious revenue models and manageable risks. If there are investments in the water and sanitation sector, they go mainly to piped infrastructure, and not to on-site infrastructure in poorer areas. Attracting commercial financing for these sectors is a great challenge. What are the implications for the FDOV and FDW projects that are seeking commercial financing to continue and to scale?

Structuring the PPP

The Dutch PPP grant programs require a project-based contingent partnership of private and public partners to implement the project. Can such a PPP attract commercial financing to continue and scale? The answer from a commercial financier's perspective is no. Such PPPs are not structured for commercial finance because:

- The PPP was set up as a contingent alliance to receive grants. It is not a legal entity that can be financed and it lacks clear ownership;
- The PPP is a project and has ended;
- Projects are not set-up to grow and scale;

If FDOV/FDW PPPs as such are difficult to finance, then what is needed to attract commercial financing?

Revenue / recovery model

First there must be a revenue model. A revenue model provides the resources for repayment of the commercial financing. In a regular business environment, the customer usually pays the supplier in the form of direct payments or through regular fees. In a public domain, such as the water and sanitation sector, the payer is not necessarily the immediate customer (or beneficiary); a government or charity may be willing to pay for the service - for example in the form of outcome payments.

In the last couple of years, a number of organizations have gained experience with results-based approaches.

Revenue models that include results-based payments modalities are potentially interesting for commercial financiers. One interesting additional benefit is that a revenue model that includes the government as outcome payer reduces the political risks.

Project or business?

How will the activities be incorporated? What is the legal entity: a project (SPV) or a business entity? As discussed in the previous section, in the public domain and in the development sector, projects are the structures of preference. This is because in a project, the deliverables are defined, there is a time frame, and there is an agreed project budget. These project characteristics are easy to communicate and governments and organizations implementing projects can thus easily be monitored and held accountable. Projects are set up to provide deliverables, on time and within budget.

Businesses are set up to make a profit for their owners, and the activities are of less importance. Of course, every business offers specific products or services, but this may change if circumstances change or better opportunities arise. Because of this flexibility, a business is much better suited to scaling and growth. In a business too, the revenues do not necessarily have to come from one specific activity (as in projects) but can come from all the products or services the business is offering.

In recent years, hybrid forms have appeared, such as social businesses. Legally these are still businesses, but they operate in social sectors or strive for reasonable profits, rather than pursuing profit maximization.

The preferred structure is a result of consultation processes and discussion between all stakeholders. Structuring is a complex, time-consuming, and therefore expensive activity.

Investing in an enabling environment

No revenue model related to SDGs will be successful in isolation; in other words, the environment must be conducive: there should be markets, people willing to pay, businesses able to supply services, government that have policies and enforce them, local financiers who are willing to provide loans (including small loans), etc.
An important question is: Who will pay for the development of the enabling environment? If the activity is organized as a project, that project can include the costs for building the enabling environment. However, a business operates within that enabling environment and will only contribute to the costs through taxes.

Ultimately, the costs of developing the enabling environment will be paid from public funds or grants. The public funds do not necessarily have to be 'input financing'; if results can be clearly defined and the outcome payers are willing to pay them, commercial financiers may be willing to finance the activities and to take on the risk until the agreed-upon results have been achieved.

Cooperation with government

Both SPVs and businesses in the water sector will focus on the delivery of the public services or the establishment of public assets. In one way or the other, government must be involved: as a partner (providing the land for water treatment plant), as a supervisor and source of law enforcement (e.g., laws for sanitation and sludge management), as a client (commissioning the building of the water treatment plant), or otherwise.

From the perspective of commercial financiers, the relationship with the government will be an important point of attention. A government can be a strong driver for success, but at the same time may constitute a major risk. Any financier will require that the role of the government is comprehensively discussed, agreed upon and documented. A government should be predictable and trustworthy, but this is often an issue in developing countries, so commercial financiers may not feel comfortable with signed documents. After all, an election, a new government, and new insights may put both the project and the repayments at risk.

Many OECD countries therefore have their own 'guarantee facilities' that cover the country risk.

- https://group.atradius.com/
- https://www.miga.org/

Financing and payment

Ensuring payments or revenues is the first step in the process of obtaining commercial financing; or, the other way around: if payments are uncertain, few commercial financiers will be interested in discussing the project or business. This is simply because only payments or revenue can ensure that the financing is repaid.

Triggered by the revenue model, discussions will start on other modalities of financing: those of structure, risks, recourse, and financing. The exact modalities are then agreed upon between the financier, the business or project owner, and the other stakeholders.

If all conditions of the commercial financier are fulfilled, the financing itself can come in many flavours. The type will depend on the financing need of the project or business, the time frame, the liquidity projection of the project or business, the liquidity projection of the financiers, and so on.

Blending in the financing structure of the project means that public funds will be used to reduce risks, making commercial financing possible. These public funds also may come in various flavours, depending on the risk perception and risk appetite of the commercial investors.

Examples of public financing instruments include:
- Subsidy for capital investments
- Subsidy for specified activities, e.g., in innovation
- Guarantee, covering commercial investor against https://www.sida.se/English/partners/our-partners/Private-sector/Innovative-Finance-/
- Insurance for country and currency risks: https://group.atradius.com/ and https://www.miga.org/

In the Netherlands, such sources of financing include RVO
- https://english.rvo.nl/ and FMO https://www.fmo.nl/

3.4 What's next?

Even if a grant PPP is very successful, mobilization of commercial financing (even in combination with public financing) does not come naturally. It begins, however, with a sound financial proposal in combination with clear objectives relating to impact. A commitment on (part of) the public financing needed to reduce the risks in the project will contribute greatly to creating enthusiasm among potential investors.

The financial proposal should at minimum include a revenue model indicating how the financing can be repaid. The proposal may include a proposal for a financing structure, but this is not a necessity. After all, this structure will be designed in discussions with all the stakeholders: the project or business owners, the public and private financiers, local governments, and others.

It is too early to conclude anything about the number of completed FDOV/FDW projects that will continue on and in what form, or about how much commercial or other funding was mobilized. The FDOV/FDW program objectives require local sustainability - so a water treatment plant should remain operational for at least 20 years. However, the program does not require continuity of the partnership and their activities.

Let us assume that so much has been learned in the PPP project, expertise has been built, products have been developed, partners have learned to cooperate in the partnership, and that this is worth continuing in one way or the other. Even more, let us suppose that an entity can emerge out of the project to provide services that contribute to the SDGs and which is attractive to commercial investors.

Now what could be done to increase the chance of this happening? Here some ideas

For project owners

Project owners should develop a solid revenue model and prepare ideas about structuring based on the inputs described above. Whenever possible, involve local and central government to reduce the risks. Consider using results-based payment models, because if they are successful there are many benefits, including that: 1) payments are secured; 2) government is involved, reducing risk;

and 3) government may be more willing to take up a role in building an enabling environment, on account of their involvement.

To grant providers

Grant providers play an important role in mobilizing commercial financing.

Financing. Grant providers should consider financing modalities other than the traditional input financing. Grants can be used for results-based payment, reducing risks for commercial financiers, paying for the development of enabling environments, and more.

Changing grant financing modalities will require willingness, determination, flexibility, modifying mandates, and even altering organizational structures. None of this comes easily, but it is needed if grant providers want to really contribute to achieving the SDGs.

Think beyond sustainability. The focus in FDOV/FDW project is on sustainability of the project deliverables - but what about growth and scaling? If these are objectives, then **service providers** should be incentivized to grow and scale. The current focus, one that is inherent to projects, concerns their implementation, deliverables, and sustainability. Incentives and modalities for growth and scaling will need to be introduced.

Investor relations. Grant providers may have, or may be able to develop, good entry points with commercial financiers, thus providing a platform for interesting projects. For example, it may be worth investing in drawing a bigger audience for the results of these programs, say, through investor conferences or publishing a bid book.

Some examples of bid books include:

- https://wle.cgiar.org/resource-recovery-waste-business-models-energy-nutrient-and-water-reuse-low-and-middle-income
- https://www.viawater.nl/files/bidbook_spreads.pdf

These bid books do not contain elaborated bankable proposals. In fact, many of the proposals may not even be bankable. What is most important is that commercial investors and stakeholders (businesses, NGOs) working on SDG projects begin discussing opportunities and how to structure proposals in such a way that they become attractive!

To commercial financiers

Some impact investors operate under the motto 'put your money where your mouth is'. But that's just the theory; in practice, many investors choose to invest in relatively safe sectors (such as energy or piped infrastructure) in combination with guarantees from governments. As there are still many investment opportunities in these safe sectors, they have little appetite to explore other sectors, such as water and sanitation, which are not easily bankable.

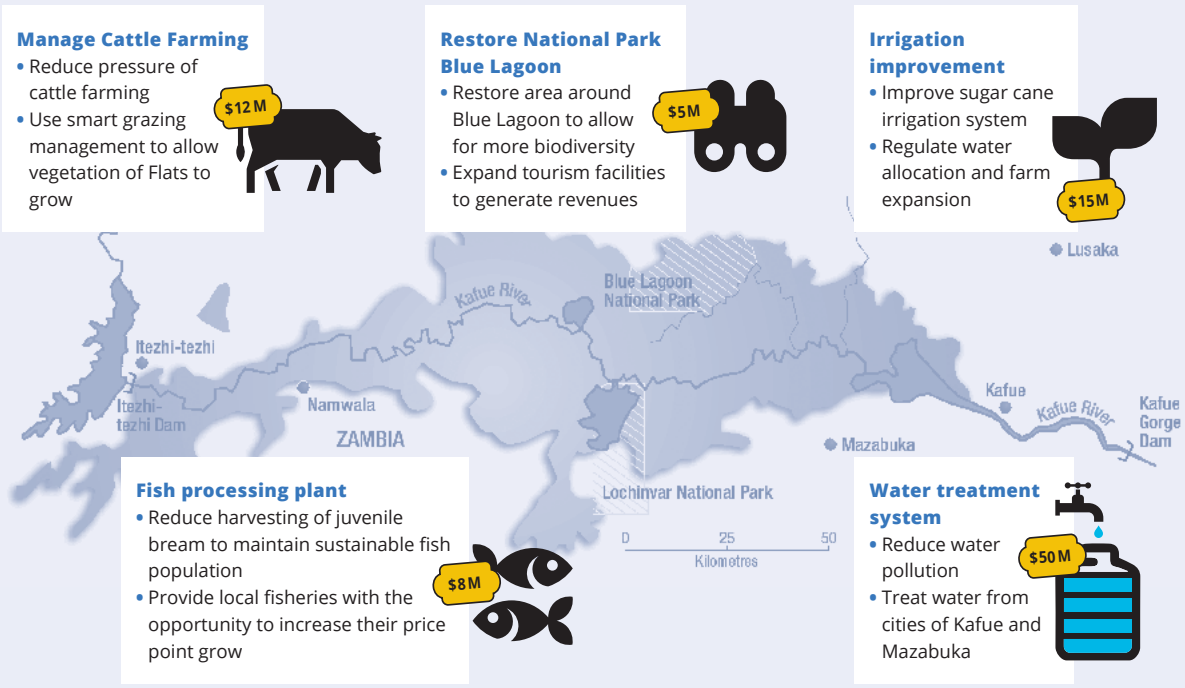
The WWF is making a brave attempt to attract commercial financiers to the water sector. The ultimate objective is commercial financing for the agri sector and the water and sanitation sector. In the short term, the provision of investors' expertise and their cooperation in pilots are already good next steps towards financing and scaling sectors that are now considered less bankable.

The WWF is also following this approach. It sees the need for commercial investment and acknowledges the difficulties and complexities of attracting commercial financing. It has thus launched a campaign providing an overview of opportunities, including projects related to the enabling environment.

See:

- http://wwf.panda.org/our_work/water/bankable_projects/

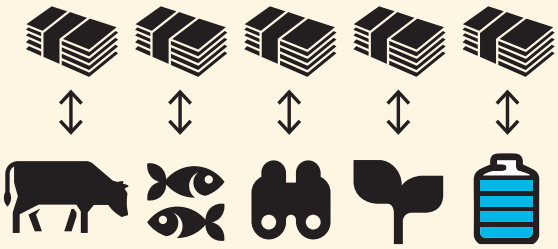
Approach for Kafue Flats could consists of a constellation of different bankable projects



Projects can be funded as single projects or together as a combined investment

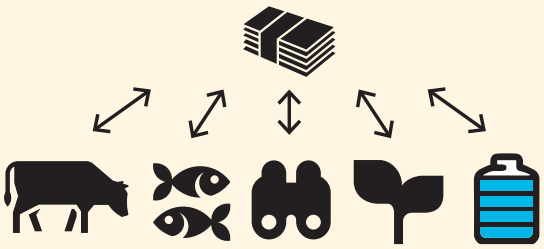
Option A: Single project investments

- Projects are funded as single investments
- Investors can decide per project to invest or not
- Investors get a return per project



Option B: Combined investment

- Projects are funded from one dedicated investment fund/vehicle
- Investors participate in the investment fund/vehicle
- Investors get a return based on overall return of the projects



Investments can consist of different financial mechanisms, blended to be able to realize all projects

3.5 Main points and observations:

- Projects compete for private funding. The water and sanitation sector and the agri sector are not attractive to financiers.
- A PPP is a project and has a clear end of life.
- From a commercial financier's perspective, the grant PPP cannot be continued. However, the take-away from the project can be structured in a new format (business or SPV) that is acceptable.
- Structuring is complex, can take a long time, and is therefore costly. These costs need to be financed. To recover these costs from the project itself, a project should have a minimum size (probably a minimum of USD 20–50 million).
- Scale is a condition for commercial financing (especially for PPPs) and not the result of financing. For small projects, this implies 'bundling' and creating funds for shared facilities, like public toilets.
- Smaller projects offer opportunities to tap into other financing resources, such as remittances or crowd-funding.
- The need for commercial financing can be reduced by applying smart payment and recovery systems. This may be an opportunity, especially in projects or businesses that do not require large upfront infrastructure.

Annex: More resources

1. *Easing the Transition to Commercial Finance for Sustainable Water and Sanitation*, Word Bank Group's Water Global Practice, 2017

https://openknowledge.worldbank.org/bitstream/handle/10986/27948/119048-WP-P159188-PUBLIC.pdf?sequence=5&isAllowed=y

2. *Blended Finance: Understanding its Potential for Agenda 2030*, Development Initiatives, 2016

http://devinit.org/wp-content/uploads/2016/11/Blended-finance-Understanding-its-potential-for-Agenda-2030.pdf

5. *Impact Investing: Who are we Serving?* Oxfam Discussion Paper, April 2017, Oxfam & Sumerian Partners/

https://www.oxfamamerica.org/static/media/files/dp-impact-investing-030417-en.pdf

6. *Impact Bonds in Developing Countries: Early Learnings from the Field,* Sept 2017

https://www.brookings.edu/wp-content/uploads/2017/09/impact-bonds-in-developing-countries_web.pdf

7. *The Potential and Limitations of Impact Bonds,* Emily Gustafsson-Wright, July 2015

https://www.brookings.edu/wp-content/uploads/2015/07/impact-bondsweb.pdf

8. *Blended Finance Vol. 1: A Primer for Development Finance and Philanthropic Funders*

http://www3.weforum.org/docs/WEF_Blended_Finance_A_Primer_Development_Finance_Philanthropic_Funders_report_2015.pdf

9. *Making Blended Finance Work for the SDGs*, OECD report 2018

https://issuu.com/oecd-dcd/docs/making_bf_work_highlights_web_opt

10. *Results Measurement in Impact Investing: A Preliminary Review*, DCED 2016

https://www.enterprise-development.org/wp-content/uploads/DCED-RM-in-Impact-Investing-Review-Brief.pdf

11. *Better Finance, Better World,* by the Blended Finance Taskforce for the Global Goals (Cochaired by Lord Mark Malloch-Brown and Jeremy Oppenheim) of the Business Commission, 2018

- http://s3.amazonaws.com/aws-bsdc/BFT_BetterFinance_final_01192018.pdf
- http://www.undp.org/content/undp/en/home/librarypage/poverty-reduction/2030-agenda/financing-the-2030-agenda.html
- https://www.oxfam.org/sites/www.oxfam.org/files/bp-private-finance-blending-for-development-130217-en.pdf
- https://www.brookings.edu/wp-content/uploads/2016/07/PPP-Press-Release.pdf
- https://www.epsu.org/sites/default/files/article/files/EC-PPPs-crit-final.pdf

12. Output and outcome payments

- https://pppknowledgelab.org/guide/sections/1-introduction
- https://ppiaf.org/

PPP LAB
FOOD & WATER

Post address:
Burgemeester Oudlaan 50
Mandeville (T) Building
Room T4-26
3062 PA Rotterdam
The Netherlands

info@ppplab.org
www.ppplab.org