



# Route SDG 6: an exploratory study on how to bridge the 85% water and sanitation financing gap

Bernd Nijen Twilhaar

## Background

Half a billion people worldwide cope with severe water scarcity all year round and the lack of water has become a severe risk to sustainable development. Causes can be found in world population growth, climate change, increasing standards of living and the development of irrigated agriculture. As a response, SDG 6 was created by the UN to provide all humans with safe freshwater and quality sanitation. This requires significant investments in innovative businesses and projects in Bottom of the Pyramid regions. However, there is currently a water and sanitation financing gap of 85%, i.e. trillions of euros are missing to attain SDG 6.

## Objective

To analyse the current state of the international BoP water development finance sector and to provide rudimental insights on which possibilities exist to bridge the 85% water and sanitation financing gap. This research is targeted at sustainable entrepreneurs, policy makers, investors and funders and will hopefully lead to an increased interest in BoP water development investments. The research question to be answered is: *how can the 85% water and sanitation financing gap be bridged as to reach SDG 6 by 2030?*

## Theory & Methods

Delineating theories from Bottom of the Pyramid entrepreneurship, investment, MLP and transdisciplinary research yielded that scaling-up BoP water businesses requires finance from both public and private sources. However, these meso-level actors are often prudent to invest in BoP segments as the markets are unfamiliar, can be quite costly and hard to serve and the potential rewards are often not high. Collaboration with practitioners is necessary. Therefore, the opinions and experiences of BoP water development financing experts and investors are required. This data was collected through conducting semi-structured interviews with experts from VEI, Aqua for All, WFF and FMO.

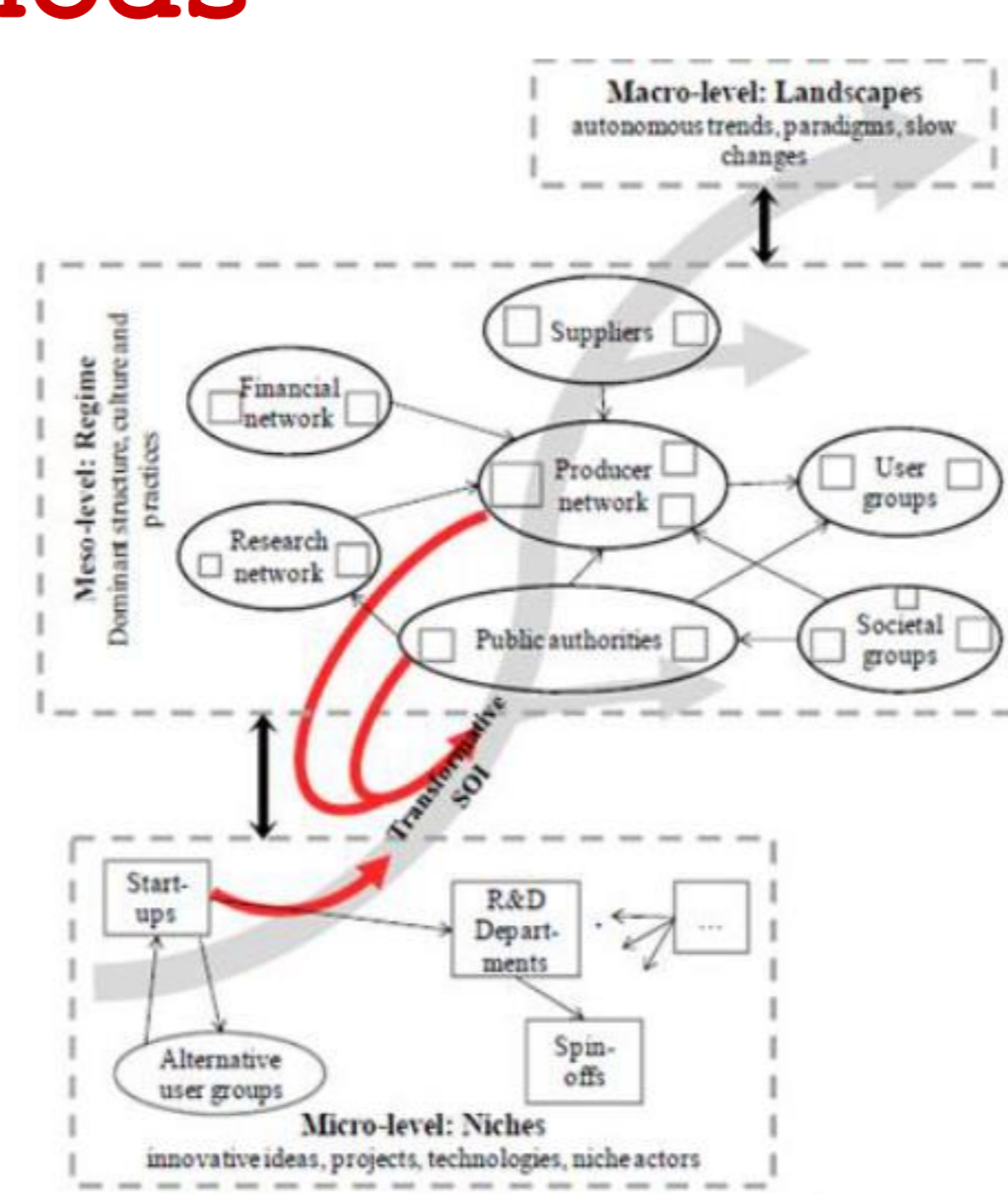


Figure 1: Multi-Level Perspective framework by J. Hörisch (2015)

## Results

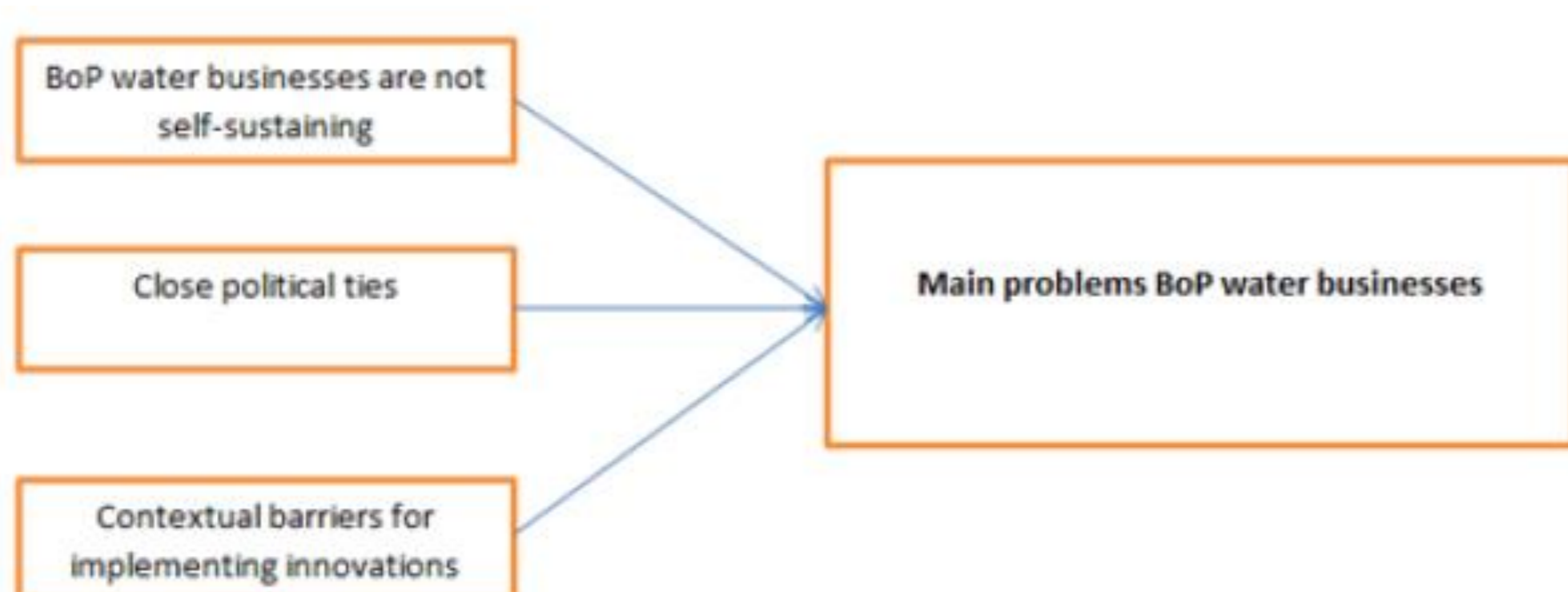
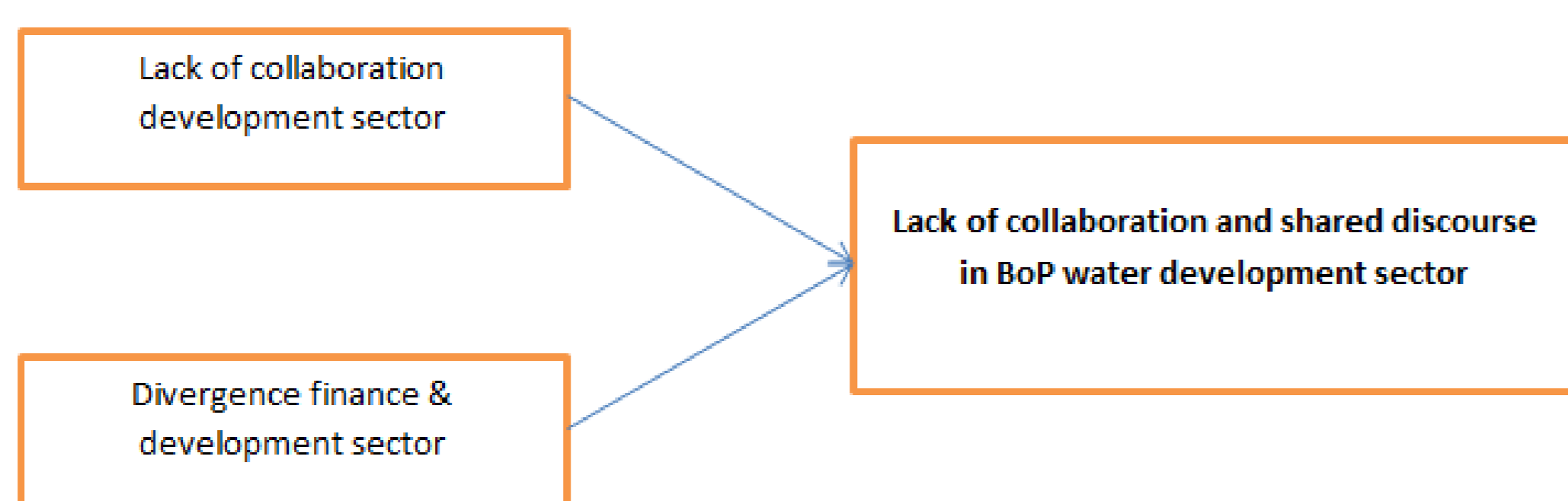


Figure 2: Fundamental problems that BoP water businesses have

Figure 3: Lack of collaboration and shared discourse in BoP water development financing sector



## Results

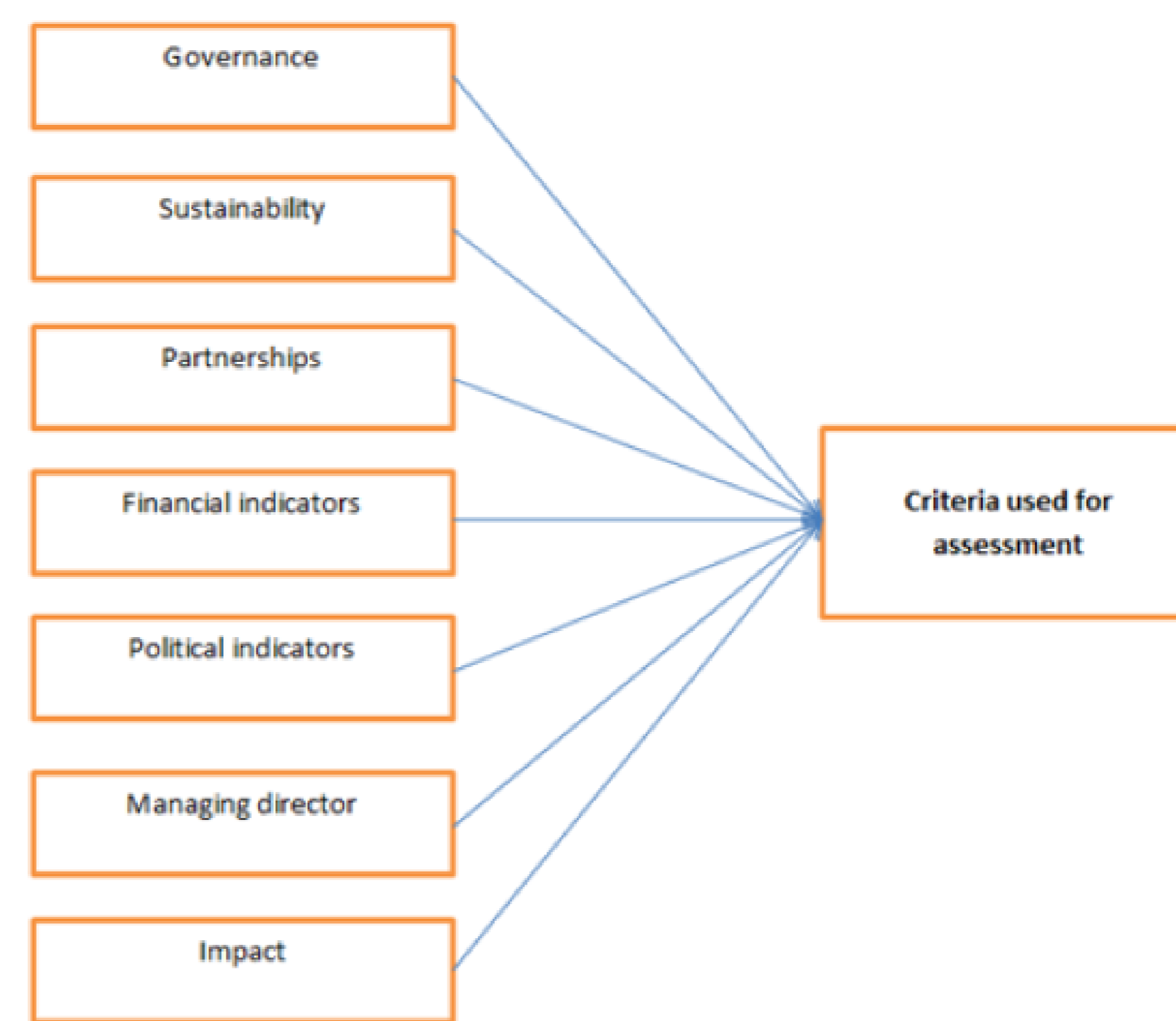


Figure 4: commonalities sets of criteria used by experts to assess BoP water business for an investment/grant

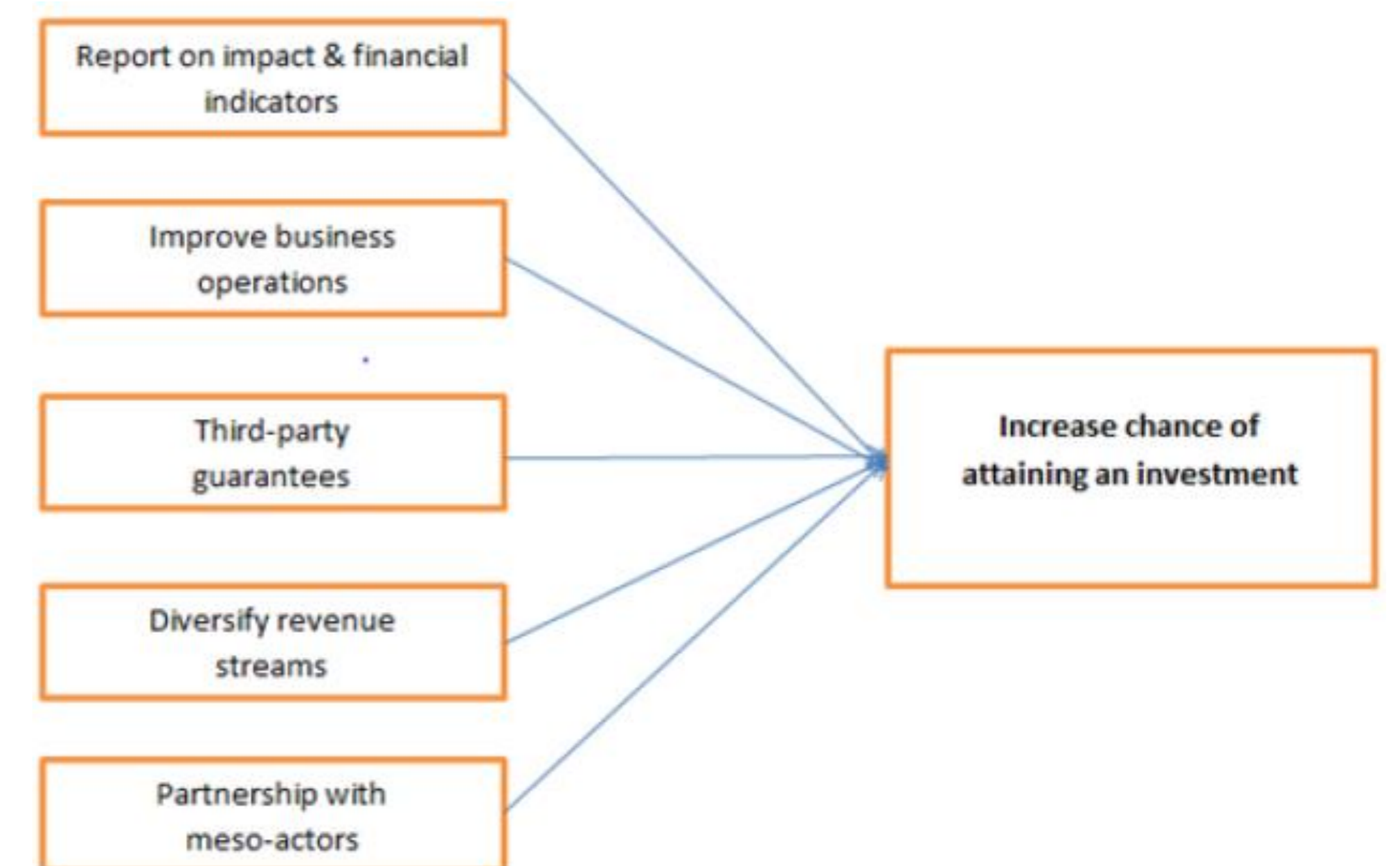


Figure 5: Methods to enhance the chance of attaining an investment

## Conclusions

On the micro-level, businesses should:

- Improve their operations by increasing tariffs
- Improve their billing so that their O&M coverage is adequate
- Diversify revenue streams

On the meso-level, actors should seek out:

- Intra-national, international and intercontinental collaborations between BoP water businesses, NGOs, institutions, private and public investors
- To share knowledge & to inspire and pressure macro-level policy makers

On the macro-level, policy makers should:

- Enforce water laws to build the necessary water infrastructure
- Let the public largely cover the costs by raising taxes
- Improve the ease of doing business

Exciting innovative business models to help bridge the gap exist such as the Aqua for All and VEI's WOP model, however not one model fits all.

Blended finance, wherein public and private funds are combined, to invest in a business has significant potential to help bridge the gap. However, for private investors the many associated risks first need to be mitigated and reduced before they consider investing in a BoP water business.