Development Impact Bonds: Background

Development Impact Bonds (DIBs) are a new approach to designing and funding development programs that bring together governments, donors, private investors, and non-profit and private sector service delivery organizations to deliver results which society values. Private investors pay in advance for social interventions and work with delivery organizations to ensure that they make progress towards agreed outcomes. If and only if independent verification shows that results have been achieved, donors and/or governments pay investors back their original investment plus a return that is proportionate to the level of success achieved. If the interventions fail, investors lose some or all of their investment (see p. 6-7 for a more detailed description of the roles of DIB parties).

The approach is based on Social Impact Bonds, which were first launched in the UK and are now being tested in the U.S. and other industrialized countries as a more cost-efficient and locally responsive way to solve social problems. A distinguishing feature of DIBs is that they would be implemented in developing countries whose governments may not yet have the resources to finance additional public services, and third party donors, such as aid agencies or philanthropists, would repay (in part or in full) investors if results are achieved. There are many potential advantages to this new outcomes-based, investment-backed contracting structure: DIBs align incentives to focus on outcomes; leverage the support of the private sector in terms of accessing finance, transferring the risk of program implementation, and increasing innovation and efficiency in service delivery through investor oversight; build in flexibility for service providers to experiment and find solutions that work; and provide a platform for coordinating government, private sector, and non-government service providers.

Diagram 1. Basic DIB Structure

A DIB could be structured as follows:

- **INVESTORS**
  - Money in
  - Return on investment depends on success

- **GOVERNMENT**
  - Development Impact Partnership (DIP)*
  - Payment based on improved outcomes

- **NGO SERVICE PROVIDERS**

- **LOCAL PRIVATE SECTOR PROVIDERS**

- **WORK WITH TARGET POPULATION**

- **OUTCOMES FUNDER(S)** (Donor agency, potentially partner government)
  - Independent verification of outcomes

* A range of potential relationships are possible between donor agencies and partner governments in terms of contract commissioning, oversight and outcome funding roles.

* New Corporate Entity
Rationale for a DIB in the nutrition sector

Malnutrition is the underlying cause of death for at least 3.1 million children a year, accounting for 45% of all deaths among children under the age of five, and stunting (low height-for-age) affected 165 million children in 2011, according to the Lancet 2013 Series on Maternal and Child Nutrition. The effects of malnutrition, particularly in the first 1,000 day period after conception, are largely irreversible, not only hindering children’s growth and health, but taking a heavy economic toll on society. At the same time, there is a growing evidence base for interventions, such as micronutrient supplementation and cash transfers, that can improve maternal and child nutrition, but persistent challenges in the sector – including incoherence, poor coordination, and persistent underfunding – have prevented the scale-up of effective nutrition interventions.

A number of recent developments – including the launch of the UN’s Scaling Up Nutrition (SUN) movement, the publication in 2013 of new evidence showing the severity of the malnutrition problem, and renewed donor commitments at the high-level Nutrition for Growth summit in June 2013 – have opened a window of opportunity for progress at the international level. Now, some of the key questions facing the nutrition community include: What can be done to take what is working to scale? How do the range of factors that affect nutritional status but are not necessarily affected by nutrition-specific interventions (such as education, behavioral norms, and gender issues) fit in?; what other evidence is needed? Tackling malnutrition will require addressing a complicated set of questions around what works and how to deliver what works to those who need it. New approaches are needed to take advantage of renewed commitments by donors and avoid what have been historically obstacles to progress in the nutrition sector. DIBs are one possible approach; below are some of the ways that a DIB structure can solve current challenges in the nutrition sector:

1. Leveraging financial support

Tackling malnutrition will require significant scaling up of resources. According to the Lancet 2013 series, the estimated annual cost (additional to current spending) of scaling up access to 10 nutrition interventions in 34 focus countries is $9.6 billion per year. Donors at last year’s Nutrition for Growth summit secured new commitments of up to $4.15 billion through 2020 ($2.9 billion of that is core funding, while the remainder is to be secured through matched funding). This represents a significant increase in funding commitments for nutrition but will not be enough to cover the costs of the range of

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interventions and levels of effective coverage needed to reduce malnutrition in priority countries - particularly given that direct health or nutrition interventions will only tackle part of the problem.²

**DIBs are a financing innovation that could leverage the support of new investors to tackle malnutrition, and create stronger incentives for scaling up evidence-based interventions funded by existing private, donor and public sector resources.**

2. **Tackling the complexity of factors affecting malnutrition**

The determinants of malnutrition are multisectoral and complex. While recent advances in research have shed light on its “direct” causes (namely health-related factors such as nutrient depletions and insufficient/inappropriate feeding), its underlying causes are less understood and much more intricate, rooted in factors like poverty, behavioral norms, and gender inequality. Furthermore, where evidence of effective interventions does exist, there is often a gap between the science and delivery, or lack of information about how to get products and services where they are most needed.

**DIBs create a financial incentive to find the most effective and efficient ways of delivering the services and commodities that people need. Because interventions are financed by private investors, there is more flexibility than there would be under traditional public sector contracts to adapt interventions according to feedback loops and changing circumstances on the ground.**

3. **Improving coordination**

The multisectoral nature of nutrition requires the coordination of many different players, including governments, NGOs, private companies and educators. Although the SUN movement has sought to improve complementarity and coordinated action, particularly at the political level, convergence and coordination continue to be a challenge, especially on the ground.⁵ Technical communities are fragmented and competitive, focused on specific health problems, interventions, or issue areas. Over the years, these communities have evolved their own conceptual frameworks, standards of evidence, and professional hierarchies, and have tended to interact relatively little, if not compete, with each other for scarce resources or attribution, a trend that traditional funding models only exacerbate.⁶

**DIBs provide a platform for coordination that is well suited to the diversity of players involved in nutrition today (public, private and non-profit), with clear roles for each of these players, and a clear focus on outcomes to which all can agree. Furthermore, because achievement of results is tied to investor financial returns, the collecting, tracking and monitoring of data becomes essential, and could help the nutrition community build a stronger evidence base for the wide range of interventions – including nutrition-specific as well as nutrition-sensitive ones - that affect nutritional outcomes.**

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⁴ In 2011, official development assistance commitments to basic nutrition were $418 million (The Aid Financing Landscape for Nutrition, Development Initiatives (2013)); the new commitments would scale up funding to $900 million annually by 2020.


⁶ Levine and Kuczynski (2009), 12.
Diagram 2. Sample DIB Structure for Nutrition

Sample DIB to Reduce Stunting: Development Impact Partnership (DIP), a new corporate entity, holds investments and contracts with donor agencies, as outcome funders; investors; and service providers. A range of relationships is possible between partner governments and the DIP and donor agencies. Financing is channeled through the DIP to pay for a suite of interventions that could reduce stunting. Results are measured and independently verified. The donor agencies pay investors back with a return, through the DIP, according to results achieved.

Considerations for designing and implementing a DIB in the nutrition sector

This section outlines broad considerations for assessing the feasibility of a DIB in the nutrition sector. It is intended to highlight some of the key aspects of the early stages of designing a DIB and to foster a discussion and is not meant to be comprehensive. The CGD-Social Finance report Investing in Social Outcomes discusses conceptual and technical considerations in much further detail.

1. Defining outcome metrics

Reducing stunting is a common goal for stakeholders in the nutrition sector and one that is relatively easy to measure; height and weight measures are the most frequently monitored metrics of child nutrition. Other possibilities to explore may be maternal and/or child anemia, which is closely related with maternal mortality and child cognition and development and can be measured through blood tests; cognitive development of young children which can be improved with better nutrition, measured using
standardized instruments, and is directly related to readiness-to-learn and other schooling (and later productivity) outcomes; and breastfeeding duration, which is a determinant of children’s nutritional status and can be measured using household surveys.

Outcome metrics should be measurable, with sufficient precision to trigger periodic (for example, annual) results payments; possible to verify independently; and should avoid perverse incentives. Anthropometric measures such as stunting, micronutrient deficiencies such as anemia, and cognitive development are all outcomes that meet these criteria.

2. Identifying the target population

Criteria for selecting a suitable pilot country or countries might include:

- High prevalence of stunting or other outcome metric
- Priority country for donors
- Stunting a policy priority for government
- Partner government interested in social investment/pay-for-performance approaches
- Potential for attribution of impact

A DIB could target groups within the critical 1,000 day window – namely, pregnant and lactating mothers and children 2-3 years of age and below. There is growing interest in adolescent health as an entry point to improve maternal and child health outcomes, but a focus on the 1,000 window may help to narrow the scope of a pilot project. Interventions would be likely to focus on poor households which usually bear a disproportionately high burden of malnutrition.

3. Defining an intervention model

Interventions under a DIB should include *nutrition-specific interventions*, which address the immediate determinants of fetal and child nutrition and development (for example, adequate food and nutrient intake, and feeding practices) as well as *nutrition-sensitive interventions*, which address underlying determinants (for example, cash transfers, or access to health services such as those included in the Integrated Management of Childhood Illness package, and a safe and hygienic environment).

Understanding both kinds of interventions and how to best combine them to achieve impact will be critical to delivering appropriate, effective and sustainable solutions and adequately meeting the needs of the most vulnerable people.

One difference between DIBs and traditional funding approaches is that a DIB would enable intervention models to be adapted throughout the life of the program, rather than requiring rigid adherence to the initial plan. Part of the purpose of tying interventions to more flexible funding is that interventions can more easily be tailored to the needs of a specific population, and can be revised as providers gather information about what is and isn’t working. Service providers and/or DIB intermediaries would need a sufficiently plausible and evidence-based intervention model at the onset to attract investor interest, but should have the space and flexibility to change the model as needed.
An additional, important consideration for the intervention model will be the platform used for delivering interventions; this could be public, non-governmental, private or community-based. At the current stage, it may be more feasible to pilot DIBs outside of the official health sector – with government support in articulating social priorities, monitoring contracts with non-governmental providers, or, where possible, funding or co-funding outcomes – although delivery platforms and the role of government will have to explored for individual contexts.

4. Attributing impact

In a DIB contract, outcome funders pay back investors their principal plus a return if outcomes are achieved, and thus will want some assurance that they can attribute results to the DIB model and interventions. It may not be possible to know what would have happened in the absence of the DIB, but a robust measurement and evaluation system can reduce two possible attribution risks: first, that outcome funders pay for an outcome that would have happened anyway, and second, that DIB investors do not get paid for outcomes that the DIB-funded interventions have generated.

Measuring the success of DIB interventions, as well as the cost-effectiveness of the approach more generally, will require establishing a baseline early in the process of developing each DIB pilot. This will require an understanding of historical trends and/or trends in similar places in order to assess possible progress ex ante. Randomized controlled trials could be used to assess the impact of the DIB but, where this is not practical, DIB implementers can also explore using historical baselines (comparing results to a consistent level of historical outcomes or predicted trend in outcomes) or live comparison groups (comparing outcomes of the intervention group against a contemporaneous comparison group that mirrors the intervention group in characteristics).

5. Payment mechanism considerations

The nature of the intervention model and the risk appetite of outcomes funders and investors will determine what investors get paid for and when. As a general rule, the longer investors must wait to get paid and the more factors they perceive to be outside of their control, the higher the financial return they will require for their investment. One way that outcome funders can control the cost of capital is to partially pay for intermediate outputs, or activities that are necessary for the delivery of an outcome (for example, construction of a health facility or delivering treatment to a minimum percentage of mothers/children in high-risk districts). The nature of the defined outcomes and the intervention model are likely to influence the extent to which output-based payments can or should be used, and the approaches used to value outputs and/or outcomes.

6. Role of DIB parties

The structures of DIB pilots will vary, but the basic roles for different parties in a DIB, to be considered for the implementation of pilots in the nutrition sector, are the following:

- **Investors** provide funds to implement interventions and assume the risk that those interventions will lead to outcomes. Investors’ objectives and risk appetites will vary; in this early stage of the
DIB market, investment is likely to come from socially motivated individuals and organizations, possibly including trusts and foundations, development finance institutions and high net worth individuals. It is possible to explore models with a guarantee, or partial protection of principal, for investors. This would reduce their risks and potentially make it easier to raise capital, although any form of investor guarantee must take into consideration the effects on the risk transfer proposition and ensure that incentives remain aligned with the achievement of outcomes.

- **Outcomes Funders** repay investors their principal plus a financial return if independent verification shows that outcomes have been achieved. In early DIBs, it is envisaged that development agencies will take the lead in paying for outcomes, in partnership with developing country governments where possible. It is also possible for foundations or private companies to provide outcomes payments. Outcome funders should provide high-level monitoring of program results, to be able to authorize outcome payments (based on independent verification of results), but should not monitor project inputs or require service providers to follow specific strategies. They must have the capacity to commit funds flexibly, according to results achieved, and over multi-year periods.

- **Developing Country Governments**’ role will be critical to the sustainability of results and will vary from one context to another. In all cases, it is expected that governments will work with outcomes funders and other DIB actors to agree the target population and definition of success for the program before it begins. Where resources exist, governments can fund or co-fund outcomes. Local government entities could also provide services under a DIB contract, although it may be more challenging to attract investment for publicly provided services than private. Where services are delivered by private providers, governments could have a role in contract oversight; through DIBs, development agencies could create mechanisms to improve host country governments’ capacities to design and monitor outcomes-based contracts, develop robust data systems, and scale up successful programs.

- **Service providers** would typically be selected and commissioned by investors or their appointed representatives to deliver pre-financed interventions. DIBs require rigorous measurement and evaluation of outcomes, and service providers will play an important role in the collection and reporting of inputs, outputs, and outcomes data, to ensure that services and commodities are reaching those who need them. The DIB could include some support, via the intermediary role, for providers who do not have adequate measurement capacity at the onset. Given that the DIB would be likely to fund a portfolio of services, different providers should work in collaboration to both complement the expertise and interventions carried out by one another and ensure the interventions are well suited to the needs of the target population.

- **Intermediaries** are third parties who act as financial intermediaries or coordinating agencies in a DIB. In the development of Social Impact Bonds, intermediaries have played a key role in bringing all parties together to negotiate an agreement. An intermediary can also play an important role in feasibility assessment, capital raising, performance management, and commissioning services and building the capacity of providers. The role of data management and analysis as interventions are rolled out (with periodic reporting back to investors on progress) has also been
a critical part of the intermediary role in SIBs and has helped to ensure that feedback loops are in place to allow service provision to respond to changing circumstances and beneficiaries’ needs.

- **DIB Verification and Evaluation.** Each DIB will require a verification agent, independent from all of the roles above, to verify reported results and ensure that all parties have confidence in them. Separate from the verification process, the process of implementing the DIB structure should be closely evaluated to inform learning about this new approach. Aid agencies or private foundations could support the development of DIBs by providing funding for these processes.

**Questions for Discussion**

- Is a DIB suitable for the nutrition sector?
- Is stunting a suitable outcome indicator? What concerns might this raise and how can they be mitigated? Are there any alternative and/or complementary measures?
- Why aren’t cost-effective interventions to reduce malnutrition reaching scale? Do DIBs adequately address these obstacles?
- Does a sufficient set of evidence-based development interventions to design a DIB and attract investors exist?
- What are the biggest obstacles to implementing a DIB?
- What are some target countries? Which governments might engage with this and in what capacity?
- How should the DIB target population be defined? What are the potential challenges of engaging with this population?
- What might be an appropriate scale and timeframe for DIB pilot(s)?
- Who are the potential players that can fund a DIB pilot in this sector (either as investors or outcomes funders) and would the approach be attractive to them?