THE GEORGE BOOLE FOUNDATION LIMITED

An invitation to participate in an international stakeholder evaluation of an advanced project design & portfolio management system

Agenda 2030 for SUSTAINABLE DEVELOPMENT GOALS

SDGToolkit.com

SDF

Sustainable Development Facility

To reduce dependency by enabling communities to address the challenges of poverty, climate change and sustainability by building competence and self-reliance.

September, 2021

Contents

The George Boole Foundation Limited

The George Boole Foundation Limited is a non-profit foundation organized in 2010 to develop beneficial digital applications for society. Since its establishment the foundation has addressed the issue of failures of internationally funded agricultural projects. A decade long review of procedures and methods applied to project cycle management was followed by an identification of design procedures to lower the risks associated with project implementation.

As a non-profit foundation there are no dividend paying shareholdings and no distribution of any margins over and above the difference in voluntary contributions and operational costs. All annual margins are reinvested in research and systems development.

The Sustainable Development Facility

The Sustainable Development Facility is a development fund and specific bank account[1] established to hold voluntary financial contributions. This account is managed exclusively to the support of SDGToolkit development, maintenance and dissemination on the basis of a low-cost of entry and operational costs model for practitioners and organizations in low income countries.

[1] Barclays plc. Appeals Account held by The George Boole Foundation Limited.

Background

As a result of reviews by the World Bank (1992) and the Independent Evaluation Group (IEG) of the World Bank (2010) the failure rate of agricultural projects was state to be close to 43%. In response, the George Boole Foundation established the Open Quality Standards Initiative[2] (OQSI) in 2010. The OQSI completed a review of existing project cycle management methods and to proposed an improved Due Diligence Design Procedure (3DP) applied to project design. After 2015 the 3DP was adjusted to accommodate the specific needs of the Agenda 2030 Sustainable Development Goals. The other result was a specification of a design of a cloud-based integrated development environment to cover the whole project cycle. This design was implemented by the Systems Engineering Economics Lab as the ***Sustainable Development Goals Toolkit (SDGToolkit)*** completed in late 2020.

Invitation

This document is an invitation of those organizations who could potentially benefit from the use of this system to participate in an evaluation of this project design and portfolio management system. The objective of this international exercise is to shape the final operational details of the system on the basis of a broader consensus of agreement as to its utility to the main potential stakeholders. Potential stakeholders include international donors and executing agency portfolio managers, project designers and managers, consultants, policy makers and farmer organizations.

The approach to be adopted

This initiative will provide the opportunity for organizations who are involved in project design, funding and execution management or oversight to gain insights into a completely new advance in the state-of the art, project design and cycle management procedures. The most significant aspect of this activity is the intention to provide participants with the opportunity of align the final operational details with their specific requirements.

SDGToolkit is a fully Integrated Development Environment (IDE) because it combines a full evaluation of national gaps and needs with a dimensioning of required actions in a format that enables a coherent quantification of project design and resource requirements. This ensures that project designs and their subsequent implementation are fully supportive of quantified national requirements.

Duration

Because of the range of stakeholders and international character of this initiative there is a need to demonstrate modules and then respond to evaluator feedback and reviews by introducing recommended changes as final operational modules.

The common internal evaluations based on the process approach (ISO 9000) are rapid and were used during the implementation process. However, this evaluation initiative will respond to the needs of different stakeholders. The whole project cycle is managed by four modules each with several supporting analytical tools. As a result, a four-phase evaluation covering the whole project cycle is estimated to require at least 3 months for each phase. This will result in the whole evaluation taking 12 months.

[2] The OQSI was established in 2010 by the George Boole Foundation as a specialised unit to investigate and make recommendations on improved project design and cycle management procedures. The OQSI is founded on existing standards but has extended some aspects linked to risk reduction including ISO process approach and OECD DAC evaluation criteria.

Details of SDGToolkit contents

The SDGToolkit system, is a cloud-based software-as-a-service. This system complies with the project design and portfolio management recommendations of the OQSI.

Details of this approach are provided in the accompanying document, ***"Donor Portfolio Management for Sustainable Agricultural Projects"*** an Agricultural Innovation[3] supplement published in July, 2021.

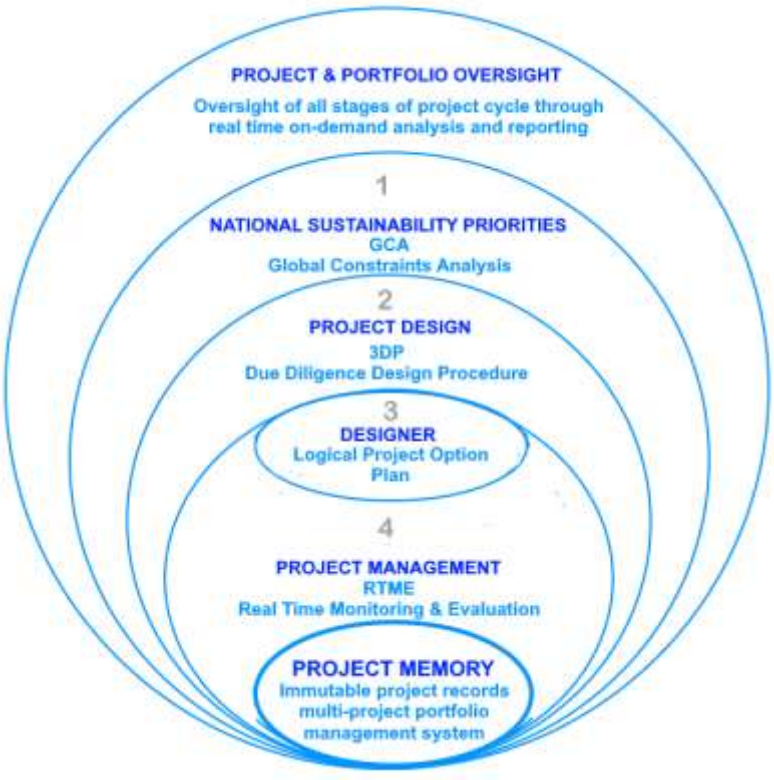
This is structured as a horizontal Due Diligence Design Procedure (3DP) with the support of a range of Analytical Tools (ATs) that carry out the specific vertical domain calculations required to complete each step in the design procedures. This creates a comprehensive evidence base upon which to identify the best project option referred to as a Logical Project Option (LPO).

The very first steps in the 3DP include gaps and needs identification and quantification making use of a Global Constraints Analysis module supported by a range of specific ATs. These are used to establish the national priorities for action in addressing Sustainable Development Goals expressed in terms immediately adapted to project design requirements.

The design procedures are followed by the completion of the project cycle including setup, operations, monitoring and evaluation and final adjustments to guarantee sustainability post-funding follow the design procedures.

Additional information on the SDGToolkit system can be accessed on the ***SDGToolkit website.***

The general layout of operational modules of the SDGToolkit as an Integrated Development Environment which combines a due diligence design procedure and portfolio management system



[3] Agriculturalinnovation.org is an online publication of the Agence Presse Européenne Media Group.

Funding support

The proposed operational basis for this exercise is for each participant in the evaluation to provide a relatively modest financial contribution to support this exercise. The minimum target for a 12 months evaluation exercise is £125,000 which we assume will be made up of several smaller contributions in a crowd-funding type initiative. The fund allocations budget lines are set out in the Annex 1.

An emphasis on an international multi-participant exercise

The larger the number of participants in this initiative the more thorough and representative will be the evaluation and the lower will be the potential financial contributions of each participant.

Operational details

During the course of the evaluation any requested changes will be implemented and will not require any additional funding or time commitments beyond those stated in this invitation. It is assumed that in some cases contributors may have different requirements and these will be accommodated by creating different applications specific plug-ins (ASPI) to enable a broader acceptance across different administrative and operational requirements and norms that exist between organizations.

The object is to enhance the relevance by producing tailored establish some ownership in versions of the final product.

Expected follow up to this evaluation

It is hoped that the evaluation exercise will result in agreement with those participants expressing an interest, in using the to support their own multi-project design support and portfolio management. In other words the system would be made available to their clients to design and manage projects while maintaining oversight of all activities.

The next steps to follow this invitation

We intend to organize a ZOOM webinar in late October or early November, 2021 to provide the opportunity for potential participants to see some demos and to receive answers and explanations on any issues they would like to raise. This will provide an opportunity for potential participants to assess their interest in providing funding support or pursuing this activity any further.

Agenda of the ZOOM meeting

- Housekeeping details

- Hector McNeill, Lead designer of SDGToolkit:

    - SDGToolkit
    - Internationally funded agricultural project performance issues
    - The Agenda 2030 challenge
    - Why is SDGToolkit needed?
    - What does it do?
    - Why a Due Diligence Design Procedure

    - Why is the Toolkit different and why are these differences important in the context of Agenda 2030 Sustainable Development Goals
    - What are the benefits to specific stakeholders
    - Expanding the user based to minimize costs of entry and operations

- Sinclair Mantell, Evaluation Coordinator

    - Evaluation stages and desired feeback
        - Global Constraint Analysis
        - Due Diligence Design Procedure
        - The Logical Project Option
        - Real Time Monitoring & Evaluation

- Open discussion Q&A

- Decisions on follow up and assessment of the level of interest in participation in the Evaluation initiative

Individuals and organizations with a potential interest in participating in this webinar can register their interest and record the dates most convenient for them to attend in the period 25th October to 5th November 2021, by making use of the evaluation registration form at:

http://www.sustainabledevelopmentfacility.org/evalreg.php

If there are any specific questions you would like to receive answers to at this stage please email:

liaison@sustainabledevelopmentfacility.org

Annex 1 Synthesis of this project

Summary of this project

1	Project title:	Evaluation and upgrade of SDGToolkit – see website ***SDGToolkit***	
2	Target being evaluated	SDGToolkit is a cloud-based software-as-a-service project design and portfolio management system	
3	Current status of target	Fully implemented as a result of a decade long review of existing project cycle management systems	
4	Organizations involved	The George Boole Foundation Limited, Systems Engineering Economics Lab, Open Quality Standards Initiative	
5	Project activity	Evaluation of due diligence design procedures and introduction of any changes deemed to be appropriate for the better operation and utility of the system	
6	Estimated project duration	12 months	
7	System structure	SDGToolkit consists of 4 basic modules each supported with analytical tools: 1. GCA_Global Constraints Analysis (to establish national actions priorities) 2. 3DP-Due Diligence Design Procedure (project level constraints analysis) 3. LPO-Logical Project Options - Designer (Selection and recording of identified project design) 4. RTME-Real Time Monitoring & Evaluation (to oversee and manage decisions over rest of project cycle through to post-funding)	
8	Proposed activity schedule	Each module will be evaluated and adjusted in individual sessions of 3 duration months to provide time to implement and document all modifications being completed by the end of each one so that is no subsequent work required. Each quarterly session will be concluded with a written evaluation report to describe the modifications introduced as well as overall description of the then status of the range of functionality.	
9	Involvement of donors	Those providing funds for this project should identify an evaluator to represent their interests and who will participate in the evaluation and who will receive status/progress reports.	
10	Maintenance of sequence	The logic of the procedures follows the module sequence listed under item 7. to identify and use information accumulated in subsequent modules. Therefore, a rational evaluation needs to follow the same sequence.	
11	Required resources	***Minimum*** target requirement is £125,000 (total over 12 months)	
12	Fund assignments	Payment and maintenance of servers	£1,400
		Database maintenance linked to software modifications	£3,600
		Website maintenance	£500
		Evaluations	£45,000
		Software modifications introduced and additions	£75,000
		TOTAL	£125,000
13	Professional effort invested to date 2010-2020	Server fees & maintenance	£40,500
		Database administration	£27,500
		Workshops and design effort	£205,000
		Evaluations	£15,000
		Programming	£250,000
		TOTAL	£538,000

<table>
<tr><td>14</td><td>Contributions schedules</td><td>Those electing to participate in this project can contribute any amount but not less than £25,000 and there is no upper limit. The sums of £25,000 can be contributed through joint submissions by say 5 or more organizations.
If the total received exceeds £125,000 then any additional sums up to a total of £250,000 will be dedicated to this project and any other future SDGToolkit design and development work.
Funds received in excess of £250,000 will be paid into a reserve fund in support of research and development activities.</td></tr>
<tr><td>15</td><td>Number of participants</td><td>Ideally in excess of five (5) participating organizations would be desirable, hopefully made up of organizations with different functions and including government agencies, consultants and farmer organizations.
For administrative reasons the maximum number of participants is likely to be around ten organizations (10).
If more than ten organizations join the overall project schedule will be extended from 12 months to 16 months with each module evaluation taking 4 months instead of 3.</td></tr>
<tr><td>16</td><td>Ownership, copyright, patent and licensing and usage rights</td><td>All ownership and copyrights and patent rights concerning SDGToolkit will remain with The George Boole Foundation Limited.
All participants in the evaluation will have the right to use the resulting SDGToolkit or variant responding to specific participant requirements. The initial licensing basis is designed to provide the Foundation with a net return of 5% p.a. on investment to date (see Section 13 above) and within which maintenance, central server services and technical support will be included.

By way of example:

<table>
<tr><td>Item</td><td></td></tr>
<tr><td>Annual server, database, website maintenance</td><td>£2,000</td></tr>
<tr><td>Estimate of technical software support</td><td>£6,000</td></tr>
<tr><td>5% return on outlays</td><td>£26,900</td></tr>
<tr><td>Annual license fee</td><td>£34,900</td></tr>
<tr><td>Monthly fee</td><td>£2,908</td></tr>
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</td></tr>
<tr><td>17</td><td>Resales conditions</td><td>The objective of SDGToolkit is to make this service available free of charge or at a very low entry fee and operational cost. Therefore, the basic principle is for those participant organizations agreeing to use SDGToolkit on this basis, also agreeing to reasonable accessible resales licenses if any are applied. In principle it is hoped that there will be n mark-up or at most 10%.

It should be noted that as a project portfolio system SDGToolkit can support any number of projects enabling user organizations to lower the overhead of the system on each project added to the portfolio. The database technology used has no theoretical limit of the number of projects supported with capacity depending on central server capacity.</td></tr>
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<tr><td></td><td></td><td>If no agreement can be found on the states licensing and relicensing conditions, linked to the annual/monthly fees detailed in item 16 and 17, then no resales conditions can be agreed and the participating organization can use the system under a normal commercial agreement whose costing is set out in item 18.</td></tr>
<tr><td>18</td><td>Commercial operations</td><td>The commercial use of SDGToolkit cannot use the SDGToolkit name but another name will be assigned in the case of such projects. The commercial variant requires an annual return of 12% leading to the following costings/fees.

<table>
<tr><td>Item</td><td></td></tr>
<tr><td>Annual server, database, website maintenance</td><td>£2,000</td></tr>
<tr><td>Estimate of technical software support</td><td>£6,000</td></tr>
<tr><td>12% return on outlays</td><td>£64,560</td></tr>
<tr><td>Annual license fee</td><td>£72,560</td></tr>
<tr><td>Monthly fee</td><td>£6,047</td></tr>
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Annex 2 profile of Hector McNeill lead designer of SDGToolkit

Hector Wetherell McNeill

Hector McNeill is a British agronomist, agricultural economist and systems engineer. Besides a practical expertise in agricultural economics and policy, he has a hands-on capability in the design and implementation of cloud-based agricultural and project management information systems.

Hector graduated in agricultural sciences (Agricultural Tripos) at Cambridge University and then completed post-graduate training in project evaluation, biometry, agricultural economics and macroeconomics at Cambridge, and international agricultural economics (Food Research Institute) and systems engineering (School of Engineering) at Stanford University.

During his 40 years of professional experience he has managed projects for FAO, NASA, ICO, CBD, SUDENE, FIBGE, FEEMA, EU-STABEX, ECRE, G7, the World Bank and the European Commission.

He was head of the NASA-CNAE Agricultural Remote Sensing Programme in Brazil. As the first remote sensing expert to be employed by FAO (Plant Production Division) he led the FAO-ICO team that developed the world's first automatic crop inventory and production forecasting system.

He was the environmental economist for the G7 Rainforest Trust Fund at the World Bank in Washington managing contracts on agroecological zoning of Amazon regions of Brazil.

He has remained abreast of information technology founding SEEL-Systems Engineering Economics Lab in 1983, to monitor the advance of information technology applications over global networks.

As a result of extensive field experience in designing, managing and evaluating projects he became increasingly concerned with the need to improve the effectiveness and efficiency of project design methods. Reviewing the World Bank portfolio reviews showing a high rate of agricultural project failures he set up The George Boole Foundation in 2010, to develop practical solutions to project design and portfolio management. With the advent of Agenda 2030 in 2015 emphasis was given to the improvement of Sustainable Development Goal agricultural project performance through the development of appropriate tools.

Hector McNeill will oversee the implementation of any design modifications arising from the evaluation feedback received during this initiative.

Annex 3 profile of Sinclair Mantell, evaluation coordinator for SDGToolkit

Sinclair H. Mantell

Sinclair Mantell is a Swedish-British botanist, agronomist, tropical agronomist, mycologist and leading researcher in plant genetics and crop propagation techniques. He has an extensive track record in project evaluation with expertise in practical solutions to agricultural problems arising from climate change.

He graduated in Botany from the University of Bristol, completed a masters in crop pathology at Imperial College, University of London and a Diploma in Tropical Agriculture and a PhD in Horticulture at the University of the West Indies.

During his 40 years professional experience, he has combined hands on experience in practical production systems innovation development with an active involvement in project and programme evaluation assignments on internationally funded agricultural projects . These have included the team leadership for the design of the six-year €5 million EU STABEX Programme (2006-2011) in Mozambique. This involved field and institutional missions to monitor and evaluate tasks to improve the institutional capacities of government institutions to carry out research collectively and to effectively transfer acquired technology to farmers and local private agrobusinesses.

He was a Senior Scientific Advisor in Forestry and Agroforestry to the International Foundation for Science (IFS), Stockholm. He created and administered the IFS Strategic Targeted Assistance to Researchers (STAR), a Distance Mentorship Initiative supporting young African scientists to undertake effective research in their home countries (2004 – 2006). He was a Scientific Consultant to Swedish Sida-SAREC, Stockholm: Evaluating the sustainability and development impacts of forestry, agroforestry and environment research initiatives based at the African Academy of Science, Nairobi and interlinking with major universities and research institutions (including the WAC) in Sub Sahara Africa (2003 – 2007). He was the leader of two final evaluations of its ten-year inter-university partnership programmes between Flemish Universities and the Sokoine University of Agriculture (Tanzania) and the University of Zimbabwe (Zimbabwe) (2007/2008) carried out as an International Expert in Higher Education for VLIR-UOS. Also, Leader of International Expert in Tertiary Education reviewing and restructuring the VLIR-UOS Inter-University Collaboration Partnership Scheme between Flanders universities and universities in Latin America, Sub Saharan Africa and SE Asia (July – December, 2011).

During the period 2005 through 2020 Sinclair provided a considerable amount of advice on systems requirements as well as incisive evaluation input to many early prototypes of SDGToolkit modules.

Sinclair Mantell will coordinate the evaluation phases and reporting during this initiative.