

# Blue Gold Program

## Water Management and Productive Sectors Innovation Funds

### Quarterly Progress Report: January – March 2017

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#### **Innovation Fund: Scope and Purpose**

The Blue Gold Innovation Fund is a tool created to accelerate the development process in the program area of the Blue Gold program, by financing innovative approaches and new initiatives to socio-economic development. Innovations submitted to the Blue Gold Innovation Fund are expected to contribute to the outcome / results of the Blue Gold program; the expected impact expected to be mostly locally or regionally centred.

In March 2017, as a result of revision to the overall TA budget, the Innovation Fund was restructured by EKN as follows:

1. Water Management Fund with a budget of € 1.4 million (focusing on water resources management)
2. Productive Sectors Fund with a budget of € 1.05 million (focusing on agricultural production and food security).

In addition, a fund of approximately € 1.4 million was transferred to the direct administration of the Embassy of the Kingdom of the Netherlands (EKN), under the joint management of Deltares/ Institute of Water Modelling: Water Management Research and Innovation Program (WMRIP).

The Innovation Fund is setup to utilize the establishment of linkages between Blue Gold and Bangladesh and Netherlands-based businesses / organisations. Contributions to innovation within Blue Gold may emerge from a wide variety of knowledge centres and enterprises, as long as the proposed activities fit within the framework of either the Water Management Fund or the Productive Sectors Fund. The Blue Gold Program will scan relevant institutions and enterprises for emerging opportunities in specific technical fields.

# 1. Introduction

This report provides quarterly updates showcasing the innovative approaches that have benefited, or will have a positive impact on, the lives of the people in the polders.

The Innovation Fund consists of a total budget of € 4.3 million, and has been divided into two separate funds: the Water Management Fund with a budget of € 2.4 million (focusing on water resources management) and the Productive Sectors Fund with a budget of € 1.9 million (focusing on agricultural production and food security). Applications to the Innovation Fund follow two routes:

- (1) **Unsolicited proposals**, which have a budget ceiling of €50,000 and focus on smaller interventions such as feasibility studies or pilots.
- (2) **Solicited proposals**, which have a budget ceiling of up to €500,000 and are initiated by Blue Gold through an international call for proposals (tender), and have a separate TOR and guideline document that will be published together with the call for proposals;

This report provides an overview of the activities of the Blue Gold Innovation Fund in the quarter April to June 2016 including:

**Unsolicited Proposals:** Chapter 2 Activities in the quarter; Chapter 3 Projects under implementation; Chapter 4 Projects under review; Chapter 5 Projects under development; Chapter 6 Projects rejected; Chapter 7 Projects completed, and Chapter 8 Financial report.

**Solicited Proposals:** Chapter 9 Status of solicited proposals.

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### Overview of Innovation Fund Proposals – as at 31<sup>st</sup> March 2017

**Unsolicited Proposals** - The table below provides an overview of the numbers of applications in process:

Proposals under implementation (Chapter 3)	Projects under review (Chapter 4)	Projects under development (Chapter 5)	Projects Rejected (Chapter 6)	Projects Completed (Chapter 7)
13	8	8	16	8
Four new proposals approved in Q1	One new proposal submitted in Q1	One new concept submitted in Q1	One proposal rejected in Q1	One project completed

**Solicited Proposals** - The table below provides an overview of the progress with solicited proposals (tenders). Further details are provided in Chapter 8.

	Planned Activities	Completion schedule	Remarks
1.	Tender on small scale dredging of in-polder drainage <i>khals</i>	Revoked	Based on discussion with EKN it was decided to cancel this tender.
2.	Tender on appropriate embankment protection measures in tidal rivers.	November 2016	As a result of joint EKN-BWDB-BGP-FRERMIP meetings in April 2017, a revised program has been proposed (see Chapter 8).
3.	Pumped drainage facility in Polder 2	First phase now funded as a unsolicited proposal	Second phase to be funded through EKN-Deltares/IWM fund.
4.	Tender on ICT in agriculture	May 2017	Expected publication in May 2017.

## 2. Activities in Q1 2017

### Promoting the Blue Gold Innovation Fund amongst SMEs in the Netherlands

Since the roll-out of the Innovation Fund in 2015, the applications to the fund have been characterized by a relatively small participation of Netherlands based enterprises, with the majority of applications coming from Bangladesh-based enterprises. As the Innovation Fund is aimed at giving practical implementation to the 'Aid to Trade' policy of EKN in Bangladesh, a larger involvement of Dutch enterprises within the scope of the Innovation Fund is desirable. Not only for the development of Dutch business in Bangladesh, but also for the opportunities that this provides for collaboration between the Netherlands and Bangladesh.

The Innovation Fund offers favourable circumstances for Netherlands-based enterprises operating in the fields of water management and agriculture that are interested in expanding their operations to Bangladesh. In order to communicate these opportunities to Small and Medium Enterprises in the Netherlands, the Innovation Fund started a partnership with the **Dutch Network Group** (DNG) in March 2017.

DNG is the owner of entrepreneur-platforms 'De Zaak' and 'MKB Servicedesk'; with a combined outreach of more than 350,000 Dutch entrepreneurs DNG operates the largest entrepreneur platform in the Netherlands. For direct marketing purposes DNG maintains a database of 88,000 detailed entrepreneur profiles (including email addresses), and a social media coverage of 45,000 subscribers (on Twitter).

Together with DNG the Innovation Fund will start a promotional campaign, using digital media (email, social media, website) to target SMEs and entrepreneurs from the Netherlands. The promotional campaign will run May - September 2017, and has three main objectives:

1. Create awareness amongst Dutch entrepreneurs in both the agriculture and water management sector, of the business opportunities that the Blue Gold Program area offers, and to motivate them to submit applications to the Blue Gold Innovation Fund
2. Enlist the Dutch agriculture- and water management- entrepreneurs to an information route to nurture them

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3. Create engagement with the Dutch agriculture- and water management- entrepreneurs to enlist with the Blue Gold Program and inspire them to implement their business ideas in Bangladesh

The aim of the promotional campaign is to result into a total amount of 48,000 views, spreading awareness about the Blue Gold project and the Innovation Fund amongst entrepreneurs in the Netherlands, which should result in an aimed amount of 15 – 20 applications to the Innovation Fund.

### 3. Projects under implementation

**Table 1 - Summary of projects under implementation**

Contract code	Name of applicant	Proposal topic	Lead Unit	Fund type	Budget	Status	Contract signed	Contract Office	Amount paid	Amount Due	Deliverables
WU6-MET	MetaMeta	Roads for Flood Protection and Water Management	WRM	Water Management Fund	€ 24,820	14 Oct 2016: Meeting BG office 03 Nov 2016: Start of project scheduled for December 15 Nov 2016: Polder selection finalized 02 Jan 2017: First invoice processed 11 Jan 2017: Workplan submitted to BG 10 Feb 2017: MetaMeta publishes blogpost on the project	YES	ARNHEM	€ 12,012	€ 12,808	AWAITING IMPLEMENTATION
PU8-CON	Consiglieri Consulting	Follow-up study on access to energy in the polders	IF	Productive Sector Fund	€ 24,957	13 Sep 2016: Request for project extension to October 22nd received and approved 22 Oct 2016: Extension deadline past 30 Nov 2016: Comments on not having received final report 07 Dec 2016: Final report received 14 Dec 2016: Comments shared, final report not accepted 20 Dec 2016: Skype call to discuss report revision 12 Jan 2017: Consiglieri re-starts field research activities 17 Mar 2017: Revised research report submitted	YES	DHAKA	€ 15,150	€ 9,807	WAITING FOR FINAL REPORT
PU9-PAC	Practical Action	Aquageoponics	SVC	Productive Sector Fund	€ 44,317	06 Sept 2016: Comments and observations BGP field team shared 15 Nov 2016: Field visit BG team to project site 07 Dec 2016: summary findings project visit shared with PA 22 Jan 2017: International field visit at PA project site 31 Mar 2017: Visit of PCD of PA project site	YES	DHAKA	€ 30,484	€ 13,833	ONGOING
WU11-FHR	FHRC	Collective action for improved water management	SVC	Water Management Fund	€ 49,996	09 Nov 2016: Progress report Sept - Oct received 11 Nov 2016: comments TA-team on progress report shared 22 Dec 2016: second invoice received 08 Jan 2017: Progress report Nov - Dec received, PAPD report received 13 Feb 2017: Field visit TA-team to FHRC project site 13 Mar 2017: Progress report Jan-Feb received	YES	DHAKA	€ 34,997	€ 14,999	ONGOING

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**Table 1 - Summary of projects under implementation (continued)**

Contract code	Name of applicant	Proposal topic	Lead Unit	Fund type	Budget	Status	Contract signed	Contract Office	Amount paid	Amount Due	Deliverables
PU10-WFI	WorldFish	EcoPonds II and empowering of women	SVC	Productive Sector Fund	€ 50,000	25 Oct 2017: Addendum to contract signed 12 Nov 2017: Progress report Sep - Oct received 17 Nov 2017: field visit BG team to project site 06 Dec 2017: Observations project visit TA-team shared 02 Feb 2017: Meeting WF and TA-team on project progress 07 Mar 2017: Visit to WF project site by TA-team	YES	DHAKA	€ 12,972	€ 37,028	ONGOING
PU13-WFI	WorldFish	Tilapia fish feed improvement	SVC	Productive Sector Fund	€ 49,996	01 Sep 2016: First proposal received 07 Sep 2016: Revised proposal + response WF received 19 Sep 2017: Revised proposal received 27 Oct 2017: Final proposal & budget received 30 Oct 2017: Draft contract approved 22 Nov 2016: Presentation on proposal by WF in Khulna office 01 Dec 2016: Contract signed 06 Dec 2016: Trial ponds selected 11 Dec 2017: Field visit report TA-team received 23 Jan 2017: Project activities start with one month delay 04 Feb 2017: Quarterly progress report received 05 Mar 2017: Monthly progress report Feb received 07 Mar 2017: Field visit TA-team to project site 30 Mar 2017: Project Inception Meeting in Dumuria & Batiaghat	YES	DHAKA	€ -	€ 49,996	ONGOING
PU14-SBY	Social Business Youth Alliance	Blue Gold Innovation Challenge	IF	Productive Sector Fund	€ 39,435	01 Sep 2016: Comments TA-team shared 18 Sep 2016: Additional comments TA-team shared 22 Sep 2016: Revised proposal received 03 Nov 2016: Proposal approved 01 Dec 2016: Contract signed 18 Dec 2016: Launch event Dhaka 28 Jan 2017: Progress report received 20 Feb 2017: Patuakhali applicant selection 07 Mar 2017: Start enterprise development training Patuakhali 02 Apr 2017: Pitch day event Dhaka	YES	DHAKA	€ 13,801	€ 25,634	ONGOING

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**Table 1 - Summary of projects under implementation (continued)**

Contract code	Name of applicant	Proposal topic	Lead Unit	Fund type	Budget	Status	Contract signed	Contract Office	Amount paid	Amount Due	Deliverables
PU15-MAR	MarGen	Natural Cold Storage	SVC	Productive Sector Fund	€ 7,747	04 Oct 2016: feedback TA-team shared 18 Sep 2016: Comments TA-team shared 25 Sep 2016: Revised concept note received 17 Oct 2016: Comments DAE on concept note received 18 Oct 2016: Revised proposal received 31 Oct 2016: Meeting with TA-team to discuss proposal 06 Nov 2016: Revised proposal received 10 Nov 2016: Final proposal received 4 Dec 2016: Final budget received 27 Dec 2016: Contract signed 28 Dec 2016: First invoice received 15 Jan 2017: Inception report received 28 Jan 2017: Meeting with MarGen in Khulna office 28 Feb 2017: Field research data compilation received 21 Mar 2017: Draft feasibility study report received	YES	DHAKA	€ 1,937	€ 5,810	ONGOING
PU16-JFA	Just Farming	Mung Bean production Management	SVC	Productive Sector Fund	€ 33,460	20 Sep 2016: concept note received 30 Oct 2016: Meeting Just Farming to discuss concept note 31 Oct 2016: Comments TA-team and notes meeting shared 15 Nov 2016: Revised proposal received 11 Dec 2016: Comments SVC-team shared 15 Dec 2016: updated proposal received 18 Dec 2016: Final proposal and final budget received 26 Dec 2016: Draft contract shared 27 Dec 2016: Contract signed 16 Jan 2017: First invoice received 13 Mar 2017: Progress report Jan - Feb received 23 Mar 2017: Field visit TA-team + observations shared 21 Mar 2017: Second invoice received 24 Mar 2017: TA team shares recommendations for project 28 Mar 2017: JF submits action plan for implementing TA-team recommendations	YES	DHAKA	€ 9,502	€ 23,958	ONGOING
PU17-MOR	Moringa Ltd	Moringa value chain development	SVC	Productive Sector Fund	€ 3,438	25 Sep 2016: New proposal and business plan outline received 28 Nov 2016: Revised proposal received 30 Nov 2016: Revised proposal approved 25 Jan 2017: Final proposal received 28 Feb 2017: Contract signed	YES	DHAKA			



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**Table 1 - Summary of projects under implementation (continued)**

Contract code	Name of applicant	Proposal topic	Lead Unit	Fund type	Budget	Status	Contract signed	Contract Office	Amount paid	Amount Due	Deliverables
PU18-ASP	Aspire	Insect Fish Feed	Agri	Productive Sector Fund	€ 8,000	08 Oct 2016: Revised concept note received 7 Nov 2016: Revised concept note received 24 Nov 2016: Meeting BG office 15 Dec 2016: Proposal for feasibility study received 25 Dec 2016: Comments TA-team shared 07 Mar 2017: Final proposal received 20 Mar 2017: Contract signed	YES	DHAKA			ONGOING
PU19-UPU	United Purpose	Women Business Centers	SVC	Productive Sector Fund	€ 25,000	10 Oct 2016: Meeting at UP office 19 Oct 2016: Visit to WBC in Batiaghata 14 Nov 2016: field visit to UP in Khulna 09 Mar 2017: Final proposal received 21 Mar 2017: Contract signed 22 Mar 2017: Promotional leaflet UP project received	YES	DHAKA			ONGOING
PS20-DNG	Dutch Network Group	Marketing campaign BG IF			€ 15,450	30 Jan 2017: First discussion on BG promotional campaign 15 Mar 2017: Final ToR of DNG received 28 Mar 2017: Contract DNG signed	YES	ARNHEM			ONGOING
PU21-PRO	ProPortion Inc & Grameen Intel	Soil testing kits	SVC	Productive Sector Fund	€ 25,000	05 Sep 2016: Meeting at BG office 23 Oct 2016: Revised proposal received 26 Oct 2016: Comments TA-team shared 23 Dec 2016: Introduced ProPortion Foundation as support for proposal development 12 Mar 2017: Proposal received with ProPortion as lead 16 Mar 2017: Comments TA-team shared 21 Mar 2017: Revised proposal received 11 Apr 2017: Final proposal received 13 Apr 2017: contract signed	YES	DHAKA			ONGOING

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### **Moringa Ltd – Development of business strategy for moringa processing**

In July 2015, Wageningen University completed their study 'Opportunities for the Development of the Moringa Sector in Bangladesh' on the commercial potential of the moringa plant in Bangladesh. This study, which was partially financed by the Blue Gold Program, identified various business opportunities for processed moringa leaves in the food and cosmetics industry, with the potential for export. Based on the Wageningen study report, the Blue Gold Innovation Fund engaged a small Bangladesh-based enterprise, **Moringa Ltd**, for further development of the commercial opportunities of the moringa plant within the BGP area.

While engaging with Moringa Ltd it became clear that there was a strong need for business planning support and capacity building. As such, the TA-team stimulated Moringa Ltd to submit a proposal for a market assessment on the moringa plant which will be led by a local business development consultant. The goal of the market assessment is to identify the business opportunities with the highest potential for Moringa Ltd, and result in the development of a business plan. Based on this business plan the Innovation Fund may provide further support for the development of the moringa processing business in the BGP area.

### **Aspire – Feasibility study on insects for fish feed**

Fish feed is a key constraint for the growth of aquaculture in Bangladesh. Increasing demand of feed and shortage of inputs for the industrial production of feed has led to exponential growth in the price of feed. Furthermore, current practices involve use of resources inefficiently which make the production methodology for fish feed unsustainable in Bangladesh.

Aspire approached the Innovation Fund with a proposal to support fish farmers in reducing the costs of fish feed and to become less dependent on imported soy meal. Aspire's idea revolves around insect larvae fish feed: training fish farmers or other small entrepreneurs / households to operate their own small insect farm to produce insect larvae as fish feed. This solution will increase the amount of jobs and keeps the money in the local economy. Another advantage will be that local waste can be reused as feed source for the insects. A new value chain will be created and many households can be involved in the breeding and processing of insects and generate a certain income.

Due to the high level of proteins, vitamins and minerals, insects seem to be a perfect feed for fish farms. Insects have all the essential amino acids that fish need for growth and development. In fact, insects form a substantial part of the diets of fish in natural settings. The idea here is to harness this natural resource to improve the yield of aquaculture in Bangladesh.

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Insects can be farmed intensively with minimal space requirements which makes insect rearing an ideal opportunity for people with limited income to increase their income potential. Additionally, the climate of Bangladesh is very suitable for insect production because the hot and humid conditions provide the ideal environment for growing and farming insects.

In order to support the local farmers and households to setup insect farms, Aspire needs to investigate the economic and social aspects of insect fish feed production. For this purpose Aspire has submitted a feasibility study proposal to the Innovation Fund. During the initial phase of the feasibility study the preliminary conditions for homestead insect production will be investigated. If the local conditions are successful, the study can be followed up with a pilot to prove the idea and verify the starting points of an expected economic and social development in the south-west regions of Bangladesh, primarily, Khulna, Satkhira and Patuakhali.

### **United Purpose – Feasibility study on women business centres**

Approximately 10-15% of smallholder farm households in Bangladesh are estimated to be female headed. Restricted mobility and participation in public life is a major factor that disempowers and limits women in their development. Although women perform more than 66% of jobs in agriculture, mostly as unskilled labourers, despite their important role women face systemic constraints in access to and control over resources such as land, credit and productivity-enhancing technologies, skills, inputs and services. Labour wages for women are 50% less than for men. Similar bottlenecks limit women to become entrepreneurs; only 2% of local entrepreneurs in Bangladesh are women.

Unfortunately, there is very little support for this vulnerable group to make their livelihoods more resilient. Public extension services do not or hardly reach smallholders, mainly because there is not enough capacity to reach out to the more than 14 million smallholder farmers. Another major problem for the largely informal agricultural value chains is the poor market organization and transparency that leads to losses, inefficiency and low farm-gate prices.

In response to the systemic constraints and inequalities that women in agriculture face, United Purpose (UP) developed the 'Women's Business Centre' concept. WBCs are established and managed by female entrepreneurs in the community and provide services to approximately 1,000 female producers formed into groups. The WBC concept uses the proven model of 'Local Service Providers' (LSPs) who are selected by the target communities and trained by the project to become community agriculture and business advisors who charge appropriate fees for their services. CU currently has 30 WBCs setup in Bangladesh; 10 in Bagerhat, 10 in Jamalpur and 10 in Khulna. The idea behind the WBC is to facilitate local women's access to services by working with female LSPs. These LSPs provide services such as agriculture training, sales of agri-inputs, healthcare, ICT (phone top-ups, printing, copying, mobile banking), improved cooking stove.

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UP approached the Innovation Fund with a proposal to establish four WBCs in the polders of the BGP: two centers in existing polders (29, 30 or 31), and two in new polders (28/1, and/or 28/2). As a first step UC will start with a feasibility study, focused on assessing the local market conditions in the polders and finalizing the entrepreneur selection. If the polder regions are found to be conducive to the establishment of WBCs, CU will submit a pilot proposal to the Innovation Fund for the implementation of WBCs.

### **Dutch Network Group – Promotional campaign for the Blue Gold Innovation Fund**

The Dutch Network Group has been contracted to implement a promotional campaign for the Blue Gold Innovation Fund amongst SMEs and entrepreneurs in the Netherlands. A detailed description of the activities can be found under Chapter 2 – Activities in Q1 2017.

## 4. Projects under review

**Table 2 - Summary of projects under review**

Date received	Name of applicant	Proposal title	Lead University	Fund type	Budget	Status	Details
16/06/2015	BARI	Hydroponics	Agri	Productive Sector Fund	€ 20,333	23 Dec 2015: email to DG BARI requesting concurrence and signature on MoU 17 Jan 2016: follow-up email to DG BARI 2 Mar 2016: visit to BARI headquarters 31 Aug 2016 BARI accepts proposal to sign MoU with BGP	Project implementation halted by BARI until MoU is signed. Awaiting opportunity to sign the MoU with the BARI Director of Training
04/04/2016	Classical Handmade Products	Handicraft production Sathkira	SVC	Productive Sector Fund	€ 21,490	3 Oct 2016: Proposal on hold as many staff have left CHP 11 Nov 2016: Revised proposal received 8 Dec 2016: Comments TA-team shared	Awaiting revised proposal
14/07/2016	Multisourcing	Digital Farmer Field Schools	SVC	Productive Sector Fund	€ 25,000	10 Oct 2016: Comments TA-team shared 13 Nov 2016: Revised proposal received 4 Dec 2016: Meeting at BG office 18 Dec 2016: Updated proposal received 29 Dec 2016: Comments TA-team shared 19 Jan 2017: Revised proposal received 08 Feb 2017: Comments TA-team shared 22 Feb 2017: Meeting with applicant at BG office	Awaiting revised proposal
20/07/2016	BARI	Irrigation technology	Agri	Productive Sector Fund	€ 44,374	07 Sep 2016: comments TA-team shared 24 Sep 2016: Revised proposal received 09 Oct 2016: Comments TA-team shared 10 Oct 2016: Revised proposal received 18 Oct 2016: Started drafting of contract	Project implementation halted by BARI until MoU is signed. Awaiting opportunity to sign the MoU with the BARI Director of Training

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**Table 2 - Summary of projects under review** (continued)

25/09/2016	<b>Errorlab</b>	Authomatic solar irrigation system	Agri	Productive Sector Fund	€ 25,000	25 Sep 2016: Concept note received 24 Oct 2016: Meeting BG office 5 Nov 2016: Draft business model received 28 Nov 2016: Draft proposal received 11 Dec 2016: Comments TA-team shared 28 Jan 2017: Revised proposal received 28 Feb 2017: Updated proposal received 15 Mar 2017: Revised proposal received 30 Mar 2017: Revised proposal received	Awaiting revised proposal
05/10/2016	<b>Lalteer</b>	Off-season vegetable production	SVC	Productive Sector Fund	€ 117,000	5 Oct 2016: Concept note received 19 Jan 2017: Comments TA-team shared 02 Mar 2017: Email from Lalteer received as response 10 Oct 2016: Comments TA-team shared 22 Dec 2016: Draft proposal received	Awaiting comments of TA-team on proposal feasibility
01/03/2017	<b>BAU Germ Plasm Center</b>	Participatory Action Research on Fruits and Vegetables	Agri		€ 48,194	01 Mar 2017: Initial project proposal received 22 Mar 2017: Initial proposal shared with DAE 27 Mar 2017: TL shares comments on proposal with BAU	

During the period January – March 2017 the Blue Gold Innovation Fund had 8 project proposals under review.

- **Multisourcing:** a proposal to digitize the content of BGP’s farmer field schools and disseminate these by making use of SMS.
- **BARI:** a proposal to test and compare three kinds of irrigation technologies, which should result in a practical irrigation tool for BG farmers.
- **ErrorLab:** a proposal to develop from scratch an automated solar powered irrigation system, which farmers are willing to pay for.
- **LalTeer:** a proposal to test the production of alternative off-season vegetables in the BG polders.
- **Pro Portion Foundation & Grameen Intel:** a proposal to develop the business model for soil testing kits.
- **Bangladesh Agriculture University:** a proposal for participatory action research with fruits and vegetables in Blue Gold polders (**NEW**)

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The development of the remaining 2 project proposals (**BARI, Classical Handmade Products**) in the above summary, which were submitted previously, will continue. Although it was expected that the proposal of **Classical Handmade Products** would be implemented in Q3 of 2016, the Q1 period of 2017 showed no significant progress in the developments of this proposal. The **BARI** proposal implementation has been halted due to difficulties in the MoU signing process with the BARI directorate. **Grameen Intel** has found a Netherlands-based partner with experience in Bangladesh, **ProPortion Inc**, to assist in the co-development of their proposal, and is expected to implement their feasibility study proposal in Q2 of 2017.

One application that was 'Under Review' in Q1 of 2017, the LightCastle proposal on potato processing in the Blue Gold polders has been moved to the 'Rejected Proposals' category. Having done an initial assessment on the potato production the LightCastle team found that the potato production quantity in the Blue Gold Program area was too small to warrant an investment in commercial potato processing activities.

## 5. Projects under Development

Table 3 - Summary of projects under development

Date received	Name of applicant	Proposal topic	Lead Unit	Fund type	Budget	Status	Detail
02/06/2016	Center for River, Harbor & Landslide Research	Climate based adaption against riverbank failure		Water Management Fund	€ -	02 Jun 2016: Concept note received 06 Jun 2016: Comments TA-team shared 24 Aug 2016: Follow-up email on status of proposal	Waiting for proposal
09/06/2016	Urban Wetlands	Floating Units for Sustainable Water treatment and Agriculture		Productive Sector Fund	€ -	16 May 2016: Visit to BG office 2 Jun 2016: Comments TA-team shared 9 Jun 2016: Concept note received 3 Aug 2016: Revised concept note received 4 Aug 2016: Comments TA-team shared	Waiting for proposal
20/07/2016	SPS	Non-electric frdige		Productive Sector Fund	€ 25,000	18 Sep 2016: Feedback TA-team shared, invited for a meeting at BG office 8 Oct 2016: Meeting BG office 24 Oct 2016: Revised proposal received 30 Oct 2016: Comments TA-team shared 7 Nov 2016: Revised proposal received 10 Nov 2016: TA-team recommends external support for proposal development	Waiting for proposal



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**Table 3 - Summary of projects under development** (continued)

Date received	Name of applicant	Proposal topic	Lead Unit	Fund type	Budget	Status	Detail
14/08/2016	BAU	Turkey Rearing		e Sector Fund	€ 25,000	9 Dec 2016: Revised concept note received 25 Dec 2016: Comments TA-team shared	Waiting for proposal
08/09/2016	North South University	Application of hybrid dryer for agriculture purposes		Productive Sector Fund	€ -	09 Oct 2016: Concept note received 8 Nov 2016: Comments TA-team shared	Waiting for proposal
20/12/2016	FlexBase	Floating Agriculture		Productive Sector Fund	€ -	20 Jan 2017: Revised concept note received 20 Feb 2017: Meeting in BG office 17 Mar 2017: Renewed concept note received from WUR 31 Mar 2017: Revised concept note received from WUR	Waiting for proposal
11/01/2017	Kaizen CR	Digital Marketplace		Productive Sector Fund	€ -	11 Jan 2017: Concept note received 17 Jan 2017: Meeting at BG office & comments TA-team shared	Waiting for proposal
31/01/2017	LCP	Farmer Market Place	SVC	Productive Sector Fund	€ 40,000	23 Mar 2017: LCP discusses concept with Khulna office 23 Apr 2017: Field visit to Khulna polders for	Waiting for proposal

The Innovation Fund currently has 8 different concept notes and proposals under development. These consist of ideas for projects that were sent to the TA-team of Blue Gold for review and feedback purposes. Below is a description of the newest proposals that was submitted to the Innovation Fund during Q1 2017:

### **LightCastle: extension of the Syngenta Farmers' Market Place to the Coastal region**

Together with seed producer Syngenta, LightCastle has setup 27 farmer's market places in the North East of Bangladesh (Rangpur region). These market places are operated on a commercial basis by a local entrepreneur (often a lead farmer) and offer farmers a combination of inputs (seeds, seedlings), market services (washing, sorting and sale of crops) and information (production advice). LightCastle expect that the

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market places will be a profitable endeavor for both the entrepreneur as well as the farmers, and already sees a number of them operating under a profit.

LightCastle is interested in expanding the farmers' market place model to the BGP area, particularly in the polders. The SVC-team of BG has responded enthusiastically and requested LightCastle to submit a proposal for a feasibility study, assessing the local market in the BG polders.

## 6. Projects rejected

**Table 4 - Summary of rejected projects**

Date received	Name of applicant	Proposal topic	Fund type	Budget	Status	Details	Amount paid
08/03/2015	Acacia Water	Feasibility study Managed Aquifer Recharge for Agriculture	Productive Sector Fund	€ 5,000		Both the EKN and the BG IF found that the commercial viability of using water for irrigation during the dry season is not sufficiently proven.	€ 5,000
24/03/2015	EcoStories	Improved Cooking Stoves	Productive Sector Fund	€ 30,500		After 5 months of inactivity from the applicant the BG IF decided to reject the proposal.	€ -
22/06/2015	Winning Agro	TA on calf rearing and product placement	Productive Sector Fund	€ -		WinningAgro did not see a possibility to introduce their livestock feed product without the BG IF directly subsidizing the price of the product. Therefore the BG IF rejected the proposal.	€ -
22/07/2015	Twijnstra Gudde	Study wind and tidal energy	Water Management Fund	€ 125,000		The TG proposal does not fit within the funding structure of the BG IF. The proposal focuses on research only and has a budget of €125,000.	€ -
17/09/2015	MetaMeta	Biological rodent control	Water Management Fund	€ 84,500		As the Blue Gold polders are not experiencing any hindrance from rodents the BG IF declines the proposal for biological rodent control.	€ -
03/12/2015	Matrix Consultancy	Strengthening cattle supply chain	Productive Sector Fund	€ 50,000		No follow up on meeting, no response. Proposal is removed from application status	€ -
01/03/2016	Patuakhali University	Carp & Tilapia hatchery	Productive Sector Fund	€ 50,000		No follow up on meeting, no response. Proposal is removed from application status	€ -
21/03/2016	Practical Action	Crab market study	Productive Sector Fund	€ 24,963		The TA-team is of the opinion that there is currently no scope for commercial & sustainable crab production inside the BG program area.	€ -

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**Table 4 - Summary of rejected projects** (continued)

Date received	Name of applicant	Proposal topic	Fund type	Budget	Status	Details	Amount paid
07/05/2016	Dutch Water Partners	Feasibility study on commercial water filtration	Productive Sector Fund	€ 25,000		EKN not convinced that proposal offers or promises anything very different from what other similar studies/projects (Sujol, MAR, etc.) have offered/tried out – and which did not, thus far, yielded any sustainable successes in terms of introducing sustainable models for commercial water vending (i.e. others than already exist local).	€ -
10/02/2016	Bangladesh Bondhu Foundation (part of GIZ)	Collaboration on improved cookstove dissemination	Productive Sector Fund	€ 21,175		Applicant is not willing to revise proposal according to comments of the BG TA-team. Applicant refuses to include a detailed description of the implementation area in the proposal. As applicant shows no willingness to revise proposal, it was decided to halt the collaboration	€ -
23/12/2015	Witteveen & Bos	Scoping mission on small scale dredging	Water Management Fund	-	15 Sep 2016: No follow up, no response. Proposal is removed from application status	With the launch of the BG tender on small scale dredging there is no direct need for a separate study on SSD	€ -
24/09/2016	JADE	Study on sheep rearing feasibility in BGP		€ 23,000	24 Sep 2016: Proposal received 10 Oct 2016: Comments TA-team shared	Proposal rejected, as there is no clear innovative aspect to the study proposal	€ -
25/09/2016	BASD	Women Empowerment – Fostering Entrepreneurship of Organic Vegetables and Fish		€ -	25 Sep 2016: Concept note received 02 Oct 2016: Comments TA-team shared. Concept note rejected	Concept rejected. The CN does not convince about any innovative nature of this project (and no research either); the project seems to overlap too much with our own vegetable and fish FFS activities; and the proposed action is too vaguely described.	€ -

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**Table 4 - Summary of rejected projects** (continued)

Date received	Name of applicant	Proposal topic	Lead Unit	Fund type	Budget	Status	Details	Amount paid
23/09/2016	Wageningen University	Information service for water logging			€ 24,500	23 Sep 2016: Proposal received 03 Nov 2016: Comments TA-team shared. Concept note rejected	The TA-team feels that the proposal of Wageningen University is too close to the Deltares proposal. Additionally, the TA-team feels that the proposal misses the connection with the needs of the BG farmers and the needs of the Bangladesh Water Development Board.	€ -
10/06/2016	Next Billion	Mobile movies Blue Gold platform	C4	Productive Sector Fund	€ 25,000	08 Sept 2016: Skype call on proposal development NB 10 Oct 2016: Skype call Next Billion 3 Nov 2016: Next Billion informs that PROOFS is not onboard for proposal 12 Nov 2016: TL decides that remaining working modality with Next Billion is not feasible for BGP	The Next Billion modality focused on utilizing the PROOFS video ladies inside the BGP area. However, PROOFS did not agree to operate under the ToR setup by BGP. The alternative option was to train BG staff and beneficiaries to do video promotion themselves, but this was deemed unfavorable as it does not match with the core priorities of the BGP.	€ -
03/10/2016	LCP	Potato processing in BG polders	SVC	Productive Sector Fund	€ 11,216	03 Oct 2016: Concept note received 05 Oct 2016: Comments TA-team shared 14 Oct 2016: Revised concept note received 1 Nov 2016: Proposal received 5 Dec 2016: Meeting with LCP to discuss proposal 8 Dec 2016: Revised proposal received 28 Jan 2017: Proposal rejected	Proposal deemed unfeasible due to lack of potato production in the BG polders.	€ -

### LightCastle proposal for potato processing in the Blue Gold polders rejected

One applications that was 'Under Review' in Q1 of 2017, the LightCastle proposal on potato processing in the Blue Gold polders has been moved to the 'Rejected Proposals' category. Having done an initial assessment on the potato production the LightCastle team found that the potato production quantity in the Blue Gold Program area was too small to warrant an investment in commercial potato processing activities. This made the proposal unfeasible for implementation in the BGP area, in which basis it was decided to reject the proposal.

## 7. Projects completed

Table 5 - Summary of completed projects

Date received	Name of applicant	Proposal topic	Lead Uni	Fund type	GATE	Budget	Status	Date Contract Awarded	Contract office
01/04/2014	<b>WorldFish</b>	Women-managed small household ponds (SHHP)	C3	Productive Sector Fund	G2	€ 45,000	05 Apr 2014: Start of project 08 Mar 2015: No cost extension June 2015 18 Jun 2015: No cost extension Dec 2015 28 Dec 2015: Final report received	05/04/2015	DHAKA
01/05/2014	<b>Neelen en Schuurmans</b>	Development and introduction of a web-based GIS information platform	C2	Water Management Fund	G3	€ 48,000	01 May 2014: Start of project 22 Aug 2015: Training mission BG staff completed 03 Sep 2015: Final report received	21/05/2014	ARNHEM/ DHAKA
01/07/2014	<b>IMARES</b>	Pearl cultivation	C4	Water Management Fund	G2	€ 10,000	01 Jul 2014: Start of desk study 01 Jan 2015: Final report received	01/07/2014	ARNHEM
16/02/2015	<b>Deltares &amp; IWM</b>	Study of Riverbank Erosion management	WRM	Water Management Fund	G2	€ 47,700	16 Feb 2015: Contract signed with IWM 7 Dec 2015: Contract signed with Deltares	-	ARNHEM
11/03/2015	<b>DWA - YEP</b>	YEP consultant via DWA Rijnland	C2	-	-	€ -	11 Feb 2015: Start of YEP recruitment procedure 09 Sep 2015: Contract signed with DWA 17 Sep 2015: Start date Ruud Leibbrand	-	-

## Blue Gold Program Innovation Fund

**Table 5 - Summary of completed projects** (continued)

Date received	Name of applicant	Proposal topic	Lead Uni	Fund type	Budget	Status	Date Contract Awarded	Contract office	Payment Details
10/04/2015	GreyShack	Scoping study on energy use in BG area	C5	Productive Sector Fund	€ 7,316	25 Aug 2015: Start project 11 Dec 2015: Initial study report received 14 Jan 2016: Workshop and discussion on report conclusions 25 Feb 2016: Received the revised final report	11/08/2015	DHAKA	COMPLETE
16/03/2015	NICE Foundation	Kawra pig rearing Khulna	C3	Productive Sector Fund	€ 49,967	1 Aug 2015: Project started 13 Aug 2015: Inception workshop 11 Nov 2015: Quarterly report 18 Nov 2015: Visit by FP DLS (Lutfur Rahman) 22-27 Dec 2015: Knowledge-sharing visit to Vietnam 31 Jan 2016: Half yearly report 4 Apr 2016: Extension request received 31 May 2016: No-cost extension approved till 1st July 2016 10 Nov 2016: Final report received 13 Nov 2016: Final report approved	05/07/2015	DHAKA	COMPLETE
WU17-DEL	Deltares	Waterapp dashboard	WRM	Water Management Fund	€ 49,238	12 Sep 2016: Revised proposal + budget received 28 Sep 2016: Proposal accepted 13 Oct 2016: Contract prepared 6 Nov 2016: Meeting BG office 7 Dec 2016: Agreement on supplementary service work IWM 30 Dec 2016: Draft report Deltares received 31 Dec 2016: Contract extended to 31st Jan 2017 31 Jan 2017: Final report received & approved	13/10/2016	ARNHEM	COMPLETE

The Deltares feasibility study for the development of a water-app / dashboard was completed during Q1 2017. Deltares developed three different prototypes for applications that can be used to monitor water levels and forecast floods inside the polders. In their research Deltares has focused on constructive solutions for future problems, as well as updated the DEM for polder 43/2B to make the next step, implementation of one of the prototypes, possible.

## Blue Gold Program Innovation Fund

For Q2 2017 it is expected that at least 4 projects will be completed. These are:

- MetaMeta: Roads for flood protection and water management
- Consiglieri Consulting: Follow-up study on access to energy in the polders
- Practical Action: Aqua-geponics
- MarGen: Feasibility study on natural cold storage



## 8. Financial report on unsolicited proposals

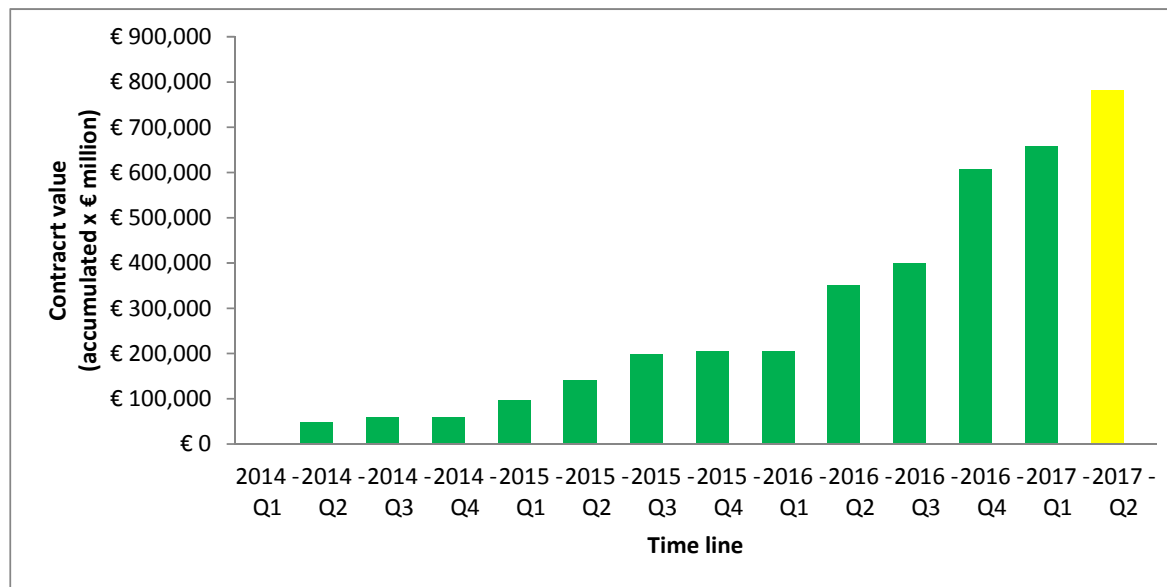
**Table 6 – Value of Contracts Awarded by Date of Award**

Period	Number of Contracts Awarded	Value of Contract Awarded	Cumulative Value of Contracts Awarded		
2014 - Q1	0	€ 0	€ 0	Actual	
2014 - Q2	1	€ 48,000	€ 48,000		
2014 - Q3	1	€ 10,000	€ 58,000		
2014 - Q4	0	€ 0	€ 58,000		
2015 - Q1	0	€ 0	€ 58,000		
2015 - Q2	2	€ 45,000	€ 103,000		
2015 - Q3	2	€ 57,283	€ 160,283		
2015 - Q4	0	€ 0	€ 160,283		
2016 - Q1	0	€ 0	€ 160,283		
2016 - Q2	5	€ 144,094	€ 304,377		
2016 - Q3	1	€ 49,996	€ 354,373		
2016 - Q4	7	€ 207,000	€ 561,373		
2017 - Q1 <i>Forecasted for Q1</i>	7	€ 159,000	€ 720,373		
<b>Actual for Q1</b>	<b>4</b>	<b>€ 51,888</b>	<b>€ 658,461</b>		
2017 - Q2 <i>Forecast for Q2</i>	4	€ 122,482	€ 780,943		<i>Forecast Q2</i>

## Blue Gold Program Innovation Fund

Although it was forecast that 7 contracts would be awarded in Q1 2017 with a cumulative value of €159,000, the total number of contracts awarded in Q1 was 4, with a cumulative value of € 51,888. Taking account of the anticipated award of contracts for 4 proposals, the forecast cumulative total for Q2 2017 is €780,943.

**Figure 8.1 Cumulative Value of Contract Awards**



## 9. Status of solicited proposals

Table 7 - Summary of solicited proposals

Tender topic	Forecasted in Q1 2017	Completion Schedule	Status	Details
Small scale dredging/excavation of in-polder drainage <i>khals</i>	<del>€ 500,000</del> € 0	end-September 2016	31 Mar 2016: interview with dredging consultant 21 Jul 2016: draft tender document shared 25 Jul 2016: comments NWP and EKN received 02 Aug 2016: coordination meeting EKN 07 Aug 2016: request for follow up meeting EKN sent 25 Aug 2016: request for follow up meeting EKN sent 12 Sep 2016: request for follow up meeting EKN sent 15 Dec 2016: Terms sheet sent to EKN for feedback 20 Dec 2016: ToR for Small Scale Dredging sent to EKN and BWDB for feedback 17 Jan 2017: EKN decides to withdraw tender	Tender revoked
Low cost embankment protection in Polder 29	€ 600,000 (forecasted expenditure over 2017 – 2018)	<del>end-September 2016</del> end of Q2 2017	23 Jun 2016: First BWDB committee meeting to agree core objectives of initiative 19 Jul 2016: ADG Planning office order establishing six member committee 18 Aug 2016: Meeting to agree design principles 4-5 Sep 2016: Visit to Lower Bhadra River by committee, IWM and EKN team 22 Aug 2016: Revised ADG Planning office order establishing six member committee 15 Oct 2016: target date for design completion 1 Nov 2016: Meeting BWDB to discuss procurement 2 Nov 2016: Project setup shared with Deltares and IWM 9 Nov 2016: BWDN design work completed, cost estimate requested 29 Nov 2016: Involvement Deltares confirmed 3 Dec 2016: Involvement IWM confirmed 6 Dec 2016: Technical and financial proposal requested	Awaiting BWDB tender procedure  Awaiting technical and financial proposal Deltares/IWM

## Blue Gold Program Innovation Fund

			<p>15 Jan 2017: Tripartite meeting (BWDB, BGP, EKN) at BWDB office</p> <p>22 Jan 2017: Request sent to IWM for proposal on review of BWDB design and post construction performance monitoring.</p> <p>10 Feb 2017: Request sent to Deltares for proposal on review of BWDB design and construction performance monitoring</p>	
<p>Pumped drainage feasibility study Polder 2.</p>	<p><del>€ 500,000</del> € 50,000 <i>(forecasted as unsolicited proposal expenditure)</i></p>	<p>NA</p>	<p>13 Nov 2016: Meeting Deltares to discuss feasibility study</p> <p>22 Dec 2016: Proposal Deltares received</p> <p>17 Jan 2017: BGP requests Deltares for a broader study approach, but under the unsolicited proposal structure</p> <p>27 Feb 2017: Deltares submits a revised proposal under unsolicited category</p>	<p>Tender is revoked, study is implemented as <u>unsolicited proposal</u></p>
<p>ICT in agriculture</p>	<p>€ 500,000 <i>(total budget reserved for implementation of tender proposals)</i></p>	<p>May 2017</p>	<p>19 Dec 2015: compilation of ICT project overview in Bangladesh completed</p> <p>20 Dec 2015: meeting Next Billion to discuss ICT collaboration opportunities</p> <p>07 Feb 2016: Co-creation workshop with WinMiaki on ICT possibilities for BG</p> <p>16 Feb 2016: meeting Practical Action to discuss ICT collaboration opportunities</p> <p>03 Mar 2016: presentation of outcomes WinMiaki workshop</p> <p>20 May 2016: TA-team workshop on horizontal learning concept + ICT within BG</p> <p>29 May 2016: meeting mPower to discuss collaboration opportunities with BG</p> <p>14 Jul 2016: concept note on Next Billion approach for BG approved</p> <p>31 Aug 2016: TA-team workshop on ICT strategy for BG</p> <p>15 Dec 2016: Terms sheet sent to EKN for feedback</p> <p>23 Dec 2016: ToR for ICT in agriculture sent to EKN and DAE for feedback</p> <p>21 Feb 2017: EKN revises budget ceiling of ICT tender to €133,000 per application</p> <p>22 Feb 2017: ToR for ICT in agriculture sent to MMD experts for feedback</p> <p>08 Apr 2017: Revised tender document shared with TA-team for final comments</p>	<p>Awaiting input from EKN and DAE before publishing tender document</p>

## Blue Gold Program Innovation Fund

### Summary of expenditure on solicited proposals

Although it was forecasted that 4 tenders would be launched in 2017, with a cumulative value of €2.1 million, the decision to revoke the tenders on Small Scale Dredging and swap the Pump Drainage Feasibility Study from a tender format to an unsolicited proposal format impact the Innovation Fund expenditure. Taking into account these changes there are two tenders remaining (Low Cost Embankment Protection & ICT in Agriculture), with a forecasted expenditure of €1.1 million.

### Small-scale dredging/excavation of in-polder drainage khals

Based on the meeting between EKN and BG TA-team on 17 January 2017, EKN decided to withdraw the tender on Small Scale Dredging & Excavation of In-Polder Drainage Khals. The limited sum for a consultancy dredging contract (€500,000) will mean that the project is not interesting for a European (dredging) contractor. This has led EKN to conclude that there is limited feasibility for this tender, based on which it was decided to revoke the tender.

### Low-cost embankment protection in coastal rivers

Based on the outcomes of a study on river bank erosion management in Polder 29 (Chandgor, Khulna) by the institute of Water Modelling (IWM), it is proposed that the permeable groynes recommended in IWM's report will be piloted to assess their suitability as a low cost form of protection of coastal river embankments.

BWDB prepared a design for semi-permeable groynes in October 2016. The cost estimate for the work was finalised by BWDB on 22<sup>nd</sup> January 2017. On 2<sup>nd</sup> February, at a meeting with ADG Planning, BWDB advised that they would not be willing to tender and supervise construction of the groynes. After further discussions, it became apparent that the finalisation of contractual arrangements by the TA team, and the procurement or prefabrication of piles and their installation would not be possible by end-May 2017, after which pile driving operations from floating pontoons in monsoon floodwaters would be inadvisable. At the suggestion of Erik Mosselman, a Deltares modelling specialist, a mechanism for stabilising the riverbank was recommended as a pre-requisite for the installation of groynes. As a result of a visit by the FRERMIP team on 13<sup>th</sup> March, sand-filled geobag revetment was recommended for this purpose. River surveys to provide information for designing the groynes were also recommended. A joint EKN-BWDB workshop to discuss and agree the way forward is planned to be held in BWDB in April 2017.

## Blue Gold Program Innovation Fund

### **Pumped drainage facility in Polder 2**

The TA-team sees a need for a broader study analysing the possibility of pumped drainage for the waterlogging problem in Polder 2. This study should cover a number of areas, including economics, design and operations. The TA-team aims for the feasibility study to be followed by an action-research pilot within a suitable WMA catchment (or sub-catchment) to demonstrate the benefits of pumped drainage along with an “improved” cropping pattern – similar to one of Blue Gold’s community-led agricultural water management (CAWM) schemes. At the end of the action-research, the pumpstation financed by the grant of the Innovation Fund would be auctioned off to the highest bidder.

The TA-team has requested Deltares to take the lead in designing the feasibility study on pumped drainage in Polder 2, with possible inclusion of experts from the Wageningen University (WUR), IWM and CEGIS. Deltares had been requested to recommend and prepare a technical and financial proposal for an action research program for a pumped drainage CAWM at one or two locations to demonstrate the benefits of pumped drainage and a cropping pattern to maximise returns.

After the initial submission of Deltares’ feasibility study proposal, it was agreed that the first phase of the feasibility study on Pumped Drainage in Polder 2 would be funded under the *unsolicited proposals* category of the Innovation Fund. Deltares followed-up by splitting the original feasibility study in two, and has submitted Phase I of the study for consideration. Phase II will comprise an action research component.

### **ICT in agriculture**

The TA-team has developed a Terms Sheet for the call for proposals of the Innovation Fund, and a specific ToR for the ICT in agriculture topic. The Terms Sheet has been approved by EKN, whilst the ToR is currently being finalized based on comments from various experts. The ICT in Agriculture tender is expected to launch in May of Q2 2017.