

# **EO MAJI EO AFRICA EXPLORERS**

## **COLLABORATION DESCRIPTIONS WITH AFRICAN EARLY ADOPTERS AND THE AFRICAN EO RESEARCH GROUP**

V1

Date: 01/12/2022

Contract No.

**4000139395/22/I-DT**

Submitted by



In Cooperation with:



UNIVERSITY OF  
**LEICESTER**



## DOCUMENT RELEASE SHEET

Author:	Héctor Nieto	Sign	Date:
Approval	Zoltan Szantoi	Sign	Date:
Distribution:	ESA and partners		

## CHANGE RECORD

Version	Date	Page(s)	Change record	Release
1	01/12/2022	10	Version submitted at KO	1.0

MINISTRE DE L'AGRICULTURE, DES  
AMENAGEMENTS HYDRO-AGRIQUES, DE LA  
MECANISATION, DES RESSOURCES ANIMALES  
ET HALIEUTIQUES

REGION DES HAUTS-BASSINS

DIRECTION REGIONALE DE L'AGRICULTURE,  
DES AMENAGEMENTS HYDRO-AGRIQUES, DE  
LA MECANISATION, DES RESSOURCES  
ANIMALES ET HALIEUTIQUES

N° 2022- /MAAH/RHBS/DRAAH



BURKINA FASO

Unité – Progrès – Justice

Bobo-Dioulasso, February 14, 2022

To: EUROPEAN SPACE AGENCY (ESA),  
The European Space Research Institute (ESRIN),  
Largo Galileo Galilei 1,  
00044 Frascati (RM),  
Italy.

Attn: Ms Dóra Tamás (CIP-POE)  
Subject: Collaboration letter for EO AFRICA – EXPLORERS.

Dear Sir/Madam,

I write on behalf of the Direction Regional de L'agriculture, des Amenagements Hydro-Agricoles, de la mécanisation, des ressources animaux et halieutiques of Burkina Faso to express our interest in participating as an **African Early Adopter** in the Invitation to Tender ("ITT") referenced as **ESA AO/I-11038/21/I-DT** with proposal no. **1000033021-8000044921-1**, with the aim of developing an **ECOSTRESS+PRISMA** solution for **irrigation water use optimization and accounting and crop yield estimation**.

I fully support Mr. Alidou Sawadogo to serve as our main collaborator on the project, as he is a conscientious, reliable, and dedicated scientist. I encourage him to expand his research network, and this project offers an opportunity to enhance his leadership skills, abilities and professional goals. He will be able to contribute to this project by providing secondary data, preparing webinars and participating in the project activities as describe in the proposal, including attending online and face-to-face Progress Meetings held following this calendar:

Name	Date	Purpose	Participants	Location
KO	Kick-Off	Kick-off Meeting	AECSIC, DHI, UoL, CSIR, MoABF, DWA, ESA	ESRIN (IT)
M2	KO+18	Acceptance of Task A	AECSIC, DHI, UoL, CSIR, MoABF, DWA, ESA	ESRIN (IT)
M3	KO+23	Acceptance of Task B	AECSIC, DHI, UoL, CSIR, MoABF, DWA, ESA	Gaborone (BW)
M4	KO+24	Final Presentation	AECSIC, DHI, UoL, CSIR, MoABF, DWA, ESA	ESRIN (IT)

The Spanish Research Council (AECSIC) will cover the travel and subsistence expenses for Mr. Alidou Sawadogo to attend to these four face-to-face meetings.

To that purpose, we will gladly collaborate with the consortium in an agile process by providing the consortium with feedback on our technical and operational needs, including providing crop yield and irrigation data in areas of interest within Burkina Faso. As a public institution, we strongly support this collaboration, which would provide us with a decision support tools for appropriate decisions making to improve irrigation performances by increasing crop yields and farmers' incomes.

Please contact me if I can answer any further questions.

Sincerely



**Directeur Régionale de l'agriculture,  
des aménagements hydro-agricoles,  
de la mécanisation,  
des ressources animales et halieutiques**



TELEPHONE: +267 3682000  
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FAX: +267 3904826



REPUBLIC OF BOTSWANA

PRIVATE BAG 00434  
GABORONE  
BOTSWANA

## MINISTRY OF LANDS AND WATER AFFAIRS

REF: CMLH 1/9/32 I (3)

DATE: 4<sup>TH</sup> August 2022

EUROPEAN SPACE AGENCY (ESA),  
The European Space Research Institute (ESRIN),  
Largo Galileo Galilei 1,  
00044 Frascati (RM), Italy,

**Attn: Hector Neto**

Dear Sir

### **REQUEST FOR COLLABORATION WITH MLWA BOTSWANA**

The above subject matter refers and receipt of the letters dated 28<sup>th</sup> February 2022 and 2<sup>nd</sup> August 2022 requesting for collaboration is acknowledged.

This services to express interest of Republic of Botswana through the Ministry of Lands and Water Affairs to collaborate with a consortium of companies lead by the Spanish National Research Council in the context of the European Space Agency Earth Observation Africa Explores on the initiative to build an Africa-European Research and Development partnership to facilitate the sustainable adoption of Earth Observation and related space technology in Africa.

The Ministry of Lands and Water Affairs (MLWA) will be represented by the Department of Policy Development and Research and, the Department of Water and Sanitation on the collaboration to address Research and

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*VISION: Sustainable Human Settlements.*

*MISSION: Management of Land and Water Resources for Socio-Economic Development*



Development issues and information requirements relevant for achieving the Sustainable Development Goals focusing on water scarcity and food security.

The MLWA request for a meeting to fully appreciate the collaboration and get relevant information prior to signing up and making commitments to the program. The MLWA is looking forward to the collaboration and awaits further engagement. Please contact Dir. Kobamelo Dikgola; Chief Research Officer at MLWA at 3682020; email: [kdikgola@gov.bw](mailto:kdikgola@gov.bw) for further communication.

Yours faithfully



Mr Nchidzi Mmolawa

/for **PERMANENT SECRETARY**

From: Council for Scientific and Industrial Research (CSIR)  
Advance Agriculture and Food  
Precision Agriculture Group  
P. O. Box 395  
Pretoria  
South Africa  
0001

Date: 15 February 2022

To: EUROPEAN SPACE AGENCY (ESA),  
The European Space Research Institute (ESRIN),  
Largo Galileo Galilei 1,  
00044 Frascati (RM),  
Italy,

Attn: Ms Dóra Tamás (CIP-POE)

Subject: Collaboration letter for EO AFRICA – EXPLORERS.

Dear Sir/Madam,

With reference to the Invitation to Tender (“ITT”) reference **ESA AO/1-11038/21/I-DT**, we are pleased to express our interest in participating as **African Earth Observation research** group to the proposal no. **1000033021-8000044921-1**, with the aim of developing an ECOSTRES+PRISMA solution for **irrigation water use optimization and accounting and crop yield estimation**.

To that purpose, we will gladly collaborate with the consortium in the scientific development of the products and solutions, by evaluating the developed prototype in a regional and educational context, and by participating in online meetings and attending the face-to-face Progress Meetings that will be held following this calendar:

Name	Date	Purpose	Participants	Location
KO	Kick-Off	Kick-off Meeting	AECSIC, DHI, UoL, CSIR, MoABF, DWA, ESA	ESRIN (IT)
M2	KO+18	Acceptance of Task A	AECSIC, DHI, UoL, CSIR, MoABF, DWA, ESA	ESRIN (IT)
M3	KO+23	Acceptance of Task B	AECSIC, DHI, UoL, CSIR, MoABF, DWA, ESA	Gaborone (BW)
M4	KO+24	Final Presentation	AECSIC, DHI, UoL, CSIR, MoABF, DWA, ESA	ESRIN (IT)

The Spanish Research Council (AECSIC) will cover the travel and subsistence expenses for one person from our institution to attend to these four face-to-face meetings.

In addition, we will help the consortium in searching and gathering crop yield and irrigation data in the areas of interest of the project, which will serve as validation and quality assessment for the developed algorithm and software prototype. Furthermore, we will apply our knowledge on the African reality to the qualitative and quantitative analysis of the developed solutions.

Finally, we will participate in webinars, by encouraging and inviting researchers, technicians and stakeholders involved in water management.

Done and signed for and on behalf of Council for Scientific and Industrial Research (CSIR):

Signature: .....

Name and title of the signatory: .....

*Prof. Moses Cato*  
*Acting Impact area Manager*  
*Advanced Agriculture and*  
*Food Cluster*





Date: 14 February 2022

To: EUROPEAN SPACE AGENCY (ESA),  
The European Space Research Institute (ESRIN),  
Largo Galileo Galilei 1,  
00044 Frascati (RM),  
Italy,

Attn: Ms Dóra Tamás (CIP-POE)  
Subject: Collaboration letter for EO AFRICA – EXPLORERS.

Dear Sir/Madam,

With reference to the Invitation to Tender (“ITT”) reference **ESA AO/1-11038/21/I-DT**, we are pleased to express our interest in participating as **African Earth Observation research** group to the proposal no. **1000033021-8000044921-1**, with the aim of developing an ECOSTRES+PRISMA solution for **irrigation water use optimization and accounting and crop yield estimation**.

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M4	KO+24	Final Presentation	AECSIC, DHI, UoL, UP, MoABF, DWA, ESA	ESRIN (IT)

The Spanish Research Council (AECSIC) will cover the travel and subsistence expenses for one person (Prof Abel Ramoelo: Director – Centre for Environmental Studies) from your institution to attend to these four face-to-face meetings.

In addition, we will help the consortium in searching and gathering crop yield and irrigation data in the areas of interest of the project, which will serve as validation and quality assessment for

the developed algorithm and software prototype. Furthermore, we will apply our knowledge on the African reality to the qualitative and quantitative analysis of the developed solutions.

Finally, we will participate in webinars, by encouraging and inviting researchers, technicians and stakeholders involved in water management.

Done and signed for and on behalf of University of Pretoria:

Signature: 

Name and title of the signatory: Prof Serena Coetzee: Head – Department of Geography, Geoinformatics and Meteorology