

**Plan for the Exploitation
and Dissemination of Results (PEDR)
and Communication Activities**

Project. No. 862900

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1. Introduction

This document presents the Plan for the Exploitation and Dissemination of Results (PEDR) for Soils4Africa. While it has been set up in view of the specifics of this particular proposal, it addresses the requirements laid out by the European IPR Helpdesk.

This document is prepared with the understanding that, as per Horizon 2020 requirements, the PEDR will be updated at various points. The final version will be part of the project's final report. It could be used to assess the project's impact. This particular version is an updated version of the PEDR that was part of the project proposal.

Both **Exploitation** and **Dissemination** involve outreach activities. This PEDR differentiates between the two based on the understanding that Exploitation involves using project results to carry out further research activities (outside the project), to develop products or services, or to carry out standardisation activities. Dissemination, on the other hand, involves reaching out the project results to various direct stakeholders (within the soil sector) and other H2020 beneficiaries. Soils4Africa also recognises the need for **Communication** activities, to disseminate relevant project updates and results in formats and through platforms relevant to a wider, non-technical audience beyond the soil sector; comprising of policymakers, journalists, businesses, and others from related sectors such as agriculture, water, etc.

Section 1 presents an outline of the PEDR, showing the different Work Packages, corresponding Exploitation and Dissemination activities, and the connections between them. Section 2 expands upon the outline, explaining the underlying strategic concerns and how they have been addressed by the various E & D activities. This is followed by a timeline that places these activities within the project timeframe.

2. Rationale and Objectives of the proposed intervention

The proposed intervention addresses priority three of Societal Challenge 2 ("Fostering functional ecosystems, sustainable food systems, and healthy lifestyles") of the Horizon 2020 Work Programme. It also responds to Priority 1 ("Addressing climate change and resilience on land and sea"). To these ends, it focuses on contributing towards Sustainable Intensification of agricultural production across Africa. The main output of the proposed intervention will be an open-access Soil Information System (SIS) for the African continent.

Needs: Sustainable intensification comprises of intensified use of chemical and organic fertilizers, use of high-quality seeds, improved water management, and control of pests and diseases. These improvements require informed decision-making, which has to be based on accurate and up-to-date soil information.

Problem: Information and analyses regarding soils in Africa is drawn from multiple sources and disparate methodologies. They are difficult to consolidate and compare. Such fragmented information cannot be used to support decision-making related to sustainable intensification.

Proposed Solution: A Soil Information System (SIS) that harmonises existing data will enable better decision-making and innovation. Standard methodologies and protocols will be developed for future data collection and analysis. They will ensure that the SIS is not merely a static database but one that will grow and adapt in response to future needs. Key to this will be ensuring that African institutions are closely involved in the process, and that they will eventually take over as hosts and supporters.

New Knowledge and Results:

(a) A state-of-the art, open-access SIS with well-defined protocols for operation, management, and future expansion (including open access primary soil data and analyses, soil maps of Africa with derived indicators, a spectral reference soil database with predication models)

(b) a catalogue of concepts for applications of the SIS,

(c) capacity building of African institutions involved in the project, including those who will take over as SIS hosts,

(d) an engaged community of soil information users, online and offline, including scientists, farmer organisations, extension workers, agri-businesses, educational organisations, and policymakers

Beneficiaries and Benefits:

(a) Policymakers, Governments NGOs: Improved monitoring of progress towards SDGs 15.3 (Land Degradation Neutrality), 1 (reducing rural poverty), 2 (reducing hunger), and 3 (improving human health).

(b) African soil research institutions involved in the project will benefit from capacity building

(c) Horizon2020 Scope A projects on Sustainable Intensification (SFS-35-2019-20) and Africultures on integrated agricultural monitoring and early warning systems (SFS-43-2017) will be able to use the SIS to better target their soil interventions and assess their impact

(d) Farmers and agri-businesses: Better targeting of fertility management measures; better impact assessment of such interventions

(e) Soil enterprises: Fertilizer producers and blenders will be able to develop region- and crop-specific products

(f) Extension workers: More targeted, higher quality advisory services to client farmers

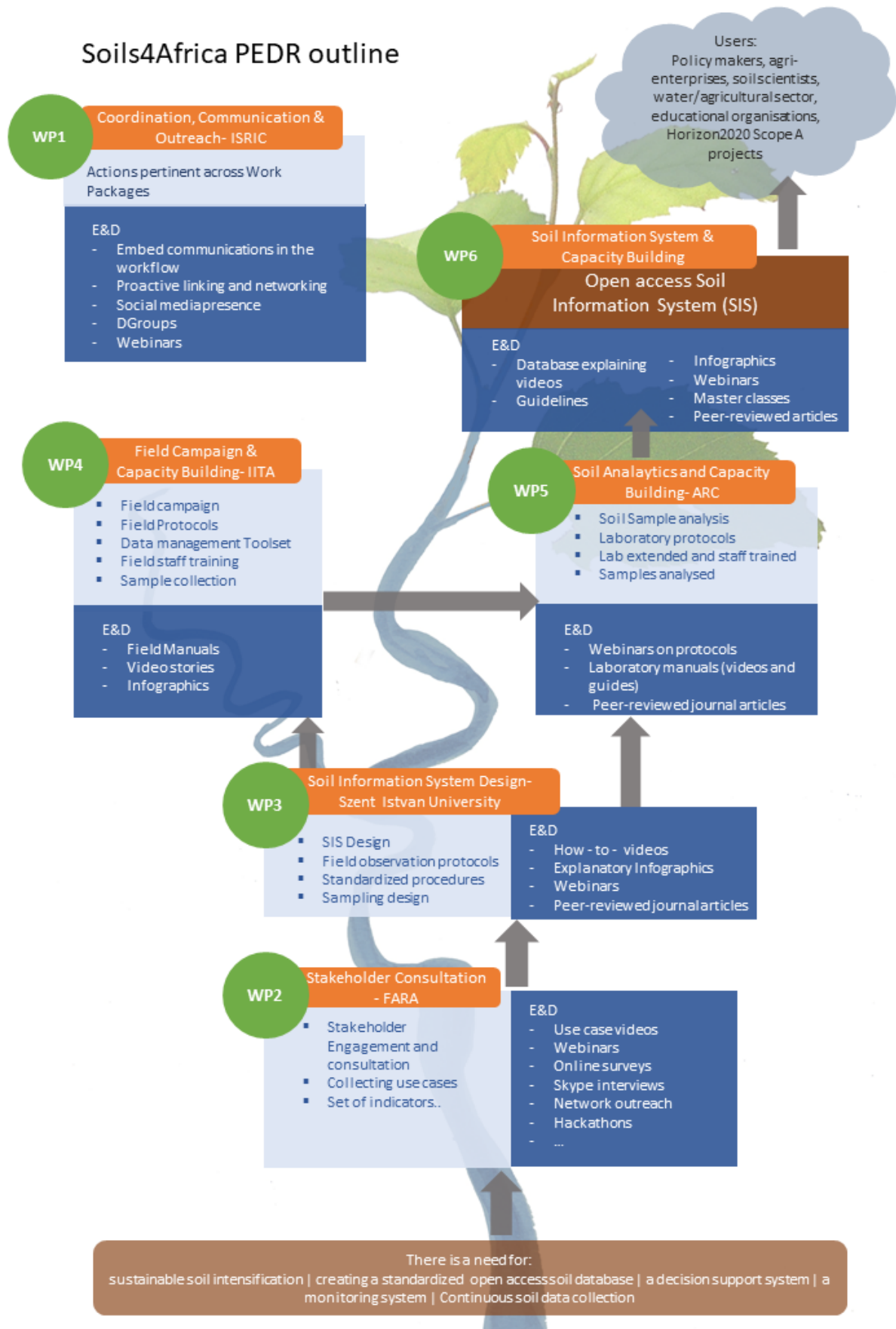
Informing end users about results: A representative selection of end users will be engaged throughout the project. Assessment of their needs will precede the SIS design and development. They will validate interim results. Once the SIS is built, it (and other project results) will be rolled out through a variety of dissemination measures such as workshops, hackathons, webinars, mailing lists, etc. (explained in detail in subsequent sections).

3. PEDR Outline

Given the key ideas of harmonization and standardization, and the Africa-wide scope of the SIS, a **wide range and large number of stakeholders** will be involved in the project **at all stages**. Their inputs will be sought for assessment of soil information needs of potential users: carrying out field campaigns and analysis; designing, building, and testing the SIS; and eventually rolling it out

as widely as possible. Thus, a variety of measures will be employed for exploitation and dissemination of results, throughout the project period, as outlined in the following diagram:

Soils4Africa PEDR outline



4. Approach

The choice of Exploitation and Dissemination measures is guided by the following concerns:

a) A continuous process: Both the exploitation and dissemination of results will be continuous, taking place throughout the project cycle.

With regards to Exploitation, this would mean building upon results that emerge even in the very early stages of the project. For example, the identification of stakeholders (led by Forum for Agriculture Research in Africa-FARA, under Work Package 2) will be followed up with webinars, and setting up of a mailing list. These steps will help widen the range of stakeholders engaged in the project, and will enable the project to share and validate results more frequently with them. This online community of stakeholders will grow throughout the project. After reaching a critical mass and momentum, it will continue to exist beyond the project period and be exploited by follow-up projects.

Similarly, continuous dissemination of project will help cultivate and engage a wider audience, beyond the immediate project stakeholders. This will include stakeholders like policymakers, who would be key to sustainability of the project outcomes; as well as the soil research community beyond Africa, whose engagement and inputs will benefit the project immensely. To this end, it will be important to document project results in easy-to-use formats such as videos and Ideas Books¹, apart from scientific papers that will be produced after completion of the field research and soil analysis.

b) Using Communication Tools in service of the research process: Apart from the purposes of dissemination, communication tools will be used in the process to support the core processes of research and building the Soil Information System, in the following manner:

- As explained in (a), webinars, mailing lists and social media will be used to engage various stakeholders and develop cases of how they use soil information in different ways (Work Package 2).
- The field campaigns (WP4) will be extensive, carried out by a number of enumerators who will have to be trained in the fieldwork methodologies (WP 3). Video tutorials will be produced to support the training.
- The usability of the Soil Information System will be enhanced through the usage guides, in the form of videos and other visual aids (Example: <http://tiny.cc/ad0t9y>), apart from standard manuals.
- Hackathons will be organized to test Beta versions of the Soil Information System (WP6), and to crowd source innovative ideas regarding its potential uses and applications.

¹ 'Ideas Books' here refers to a non-scientific publication format, a compilation of case studies, insights, key findings of a research process presented in an easy-to-read format; meant for a wide range of audience such as policymakers, journalists, experts from other sectors, etc.

c) An emphasis on visual tools: As explained earlier, a number of visual products will be developed at various stages of the project, such as videos and graphics. As a strategy, this will contribute towards the objective of reaching out the project results beyond soil scientists, such as to farmer organisations, extension workers, and policymakers.

d) Internal Communication: Given the scale and scope of the proposed intervention, internal communication will have to be efficient and continuous. There will be continuous exchange of information between different Work Packages. To this end, regular modes of communication will be facilitated by physical events, online webinars, mailing lists, as well as social media platforms such as LinkedIn. MetaMeta will support ISRIC and other Work Package Leaders in planning and implementing these activities

e) Availability and Protection of Data and Results: In line with the Open Access policy of Horizon 2020, the project results as well as data will be made available to the public through the project website. The website will serve as a repository for the results and data, while the warmer channels of dissemination (workshops and meetings, webinars, social media, etc.) will share results from time to time.

f) Language: In view of the linguistic profile of Africa and the key stakeholders, key dissemination products will be produced in English and French.

5. Strategic Concerns

a) Strategic engagement of key stakeholders, for sustainability of project results: Apart from general dissemination of project results, dissemination will also be targeted strategically at organisations that could potentially support the Soil Information System after the project period. As part of FARA's efforts to engage key stakeholders under WP2, systematic identification of organisations that could potentially support the SIS will be carried out during the inception period of the project. Currently, the African Association of Remote Sensing of the Environment (AARSE), Association for Strengthening Agricultural Research in Eastern and Central Africa (ASARECA), and the African Union Science and Technology Division are recognized as potential supporters.

b) Linking with initiatives in and beyond the soil sector: Soils4Africa will establish linkages with Horizon2020 Scope A projects (such as LEAP4NSSA), Copernicus Users Uptake Programme (FPCUP) and AfriCultures. Assessment of their needs will inform the SIS design, and they will be involved in validation of its Beta versions. Additionally, Exploitation and Dissemination activities will explore and establish similar connections with organisations and initiatives beyond the soil sector, such as water management. For example, The project consortium has ongoing dialogue with FAO's WaPOR database (<https://wapor.apps.fao.org/home/1>), a pan-Africa-MENA information system on agricultural water productivity which is currently undergoing validation.

c) Leveraging dissemination networks such as The Water Channel: The Water Channel (www.thewaterchannel.tv) is a leading water and agriculture media platform, hosting close to 3000 videos, more than 60 webinars, 200+ blog posts and several dossiers on key water and agriculture themes (including soil). It attracts a monthly viewership of close to 90,000 visitors on the website, more than 18,000 followers on social media, and 1700+ subscribers of its mailing list. This platform and its audience base will be leveraged to disseminate project results. Similarly, established mailing lists administered by project partners, such as the FARAnet (<https://dgroups.org/fara-net>) and PAEPARD D-group (<https://dgroups.org/paepard>), with 7,000 and 11,000 subscribers respectively, will be utilised for dissemination.

6. Communication Activities

Communication is very closely linked to dissemination. Indeed, all dissemination measures described in section 2.2.a), the draft PEDR, are also communication measures. Soils4Africa recognises the need for Communication measures as the Dissemination measures designed to make research activities (research results as well as updates/developments) known to multiple audiences outside the soil sector: policymakers, journalists, the general public, etc. The emphasis on Communication activities is in keeping with the project's view that the Soil Information System is not a mere research tool; it has wider applications among a variety of stakeholders.

Critical to the Communication of relevant project results will be Work Package 2, led by Forum for Agricultural Research in Africa, FARA. WP2 activities will focus on engaging various users/potential users of Soil Information. They will include a wide range of stakeholders, including non-specialist audience such as policy makers, researchers, NGO's and private sector involved with soils.

Following are some of the communication tools, channels, and approaches that will be utilised during the project:

1. Project logo: will be central to the branding of the project. It has been developed, with inputs from various project partners and closed involvement of the Work Package leaders. It will be used across project outputs and communiques to generate a high recall value over time.



Developing the logo involved an attempt to strike a balance between two concerns that sometimes compete with each other:

- depict as many details as possible regarding the project
- ensure that the logo is simple and compact enough to be visible and discernible even when reduced to a small size, such as on business cards/ name tags

The logo was developed to have two dominant colours: brown and green. The brown is used in different shades, which is meant as a visual expression of different kinds of soils spread across Africa. The green represents the ultimate objective of good, data-driven soil management, i.e. the ultimate realm of impact of the project: Sustainable Intensification of Agriculture.

The other dominant visual element in the logo is the African continent, depicting quite literally the purview of the project.

The different grid lines spreading into different parts of Africa represent the outreach of the project activities in different parts of Africa. They end up in or circles at various points in Africa, which represent the different soil sampling points.

2. EU emblem and reference to EU funding: will help drive home the message that this is an EU-supported project, as required of all EU projects.

3. Project Website: The project website will serve as the repository of all project outputs and timely updates. It has been put up at the URL <https://www.soils4africa-h2020.eu/>. It is also accessible through the URL <https://www.soils4africa.eu/>

The website has static content such as the project description (<https://www.soils4africa-h2020.eu/the-project>) and a description of partners (<https://www.soils4africa-h2020.eu/team>). Besides, it has more dynamic sections where content will be updated more frequently, such News (updates from the projects, partners, and Horizon 2020) (<https://www.soils4africa-h2020.eu/news>); Documents (from the project and other sources relevant to Soil Information) (<https://www.soils4africa-h2020.eu/documents>); and Images and Videos (also those from the project and related ones from other sources) (<https://www.soils4africa-h2020.eu/images-videos>)

4. Social Media: The number of social media users is growing rapidly. Social media platforms are increasingly becoming their primary points of entry to the internet, and their primary search engine. Thus, Soils4Africa will use social media to reach various audiences, keep them updated about project developments, seek their inputs to research and participation in events, and to draw them to the project website.

In these early months of the project, when the project has not yet started producing primary outputs on its own, the platforms are being used to introduce the project and to share important resources and developments from other sources such as the Horizon 2020, Leap4FNSSA programmes, and the various project partners. This will be important as it will enable the project to leverage and build upon the considerable outreach of project partners on various platforms.

- Twitter: <https://twitter.com/Soils4A>
- Facebook (Group): <https://www.facebook.com/groups/310344250300275/>
- LinkedIn (Group): <https://www.linkedin.com/groups/8970435/>

YouTube will be used as the project's video channel. It will be setup as and when the project starts producing videos.

5. TheWaterChannel: TheWaterChannel (www.thewaterchannel.tv), run by MetaMeta and IHE-Delft is an online platform with videos, blog posts, and webinars on water and natural resource management. Through its website, mailing lists, and social media platforms it reaches out to a 90,000+ audience on a monthly basis, including general audience such as journalists and policymakers. TheWaterChannel's reach will be leveraged to boost Soils4Africa's outreach online.

6. Use of Video: Key project results, identified as relevant also to multiple audiences beyond the soil sector, will be documented in the form of videos. This is in recognition of video as a format suited for capturing non-technical/ policy implications of research results, and comprehensible to a wide range of audience. Example of such project results include case studies of how various stakeholders use soil information, which will be captured through a video series provisionally entitled 'Soil Stories.' Another example is video manuals for the Soil Information System (SIS), which will explain in a visual way to non-technical audiences how they can use the SIS for their specific purposes.

As mentioned earlier, a project YouTube channel will be set up as soon as the first videos are produced.

7. Exploitation and Dissemination Activities per Work Package, and Timeline

Table 1 below provides an overview of the planned Exploitation and Dissemination activities per Work Package over the 4-year project period.

During the current reporting period (June-September 2020), the workplan of Work Package 2 was updated and detailed. This makes it possible to make a more detailed, month-by-month plan for Exploitation and Dissemination for Work Package 2. That plan is presented in Table 2.

Table 3 depicts project-level Exploitation and Dissemination activities, i.e. relevant across work packages.

Table 4 is the operating Content Calendar, i.e. planning of content for the project's various dissemination platforms. The Calendar serves as a guide and will be reviewed and updated frequently. Content will be created and published outside the calendar as and when deemed appropriate.

Table 1: Exploitation and Dissemination Activities per Work Package

Work Package (Leader)	Objective	Exploitation and Dissemination Actions	Target Audience	Indicators	Years (4)	
WP 2 Forum for Agricultural Research in Africa (FARA)	➤ Stakeholder Consultation, Collection of Use Cases, ➤ Identifying SIS indicators	Online interviews	Potential SIS users	20 potential SIS users from across 5 zones interviewed		- (Question) What are your various soil information needs? - (Question) What are the various sources of soil information that you access? What are the gaps. - (Message) This Soil Information System is being developed based on your needs and with your inputs.
		Online questionnaire survey	Potential SIS users	200 potential SIS users' responses collected through online questionnaires		
	➤ Documentation and dissemination of Use Cases	Virtual Workshop/ Webinar	Select stakeholders	2 virtual workshops organised; Use Cases presented to select group of expert stakeholders and validated		
		Videos	All stakeholders and general public	8 videos covering 8 Use Cases produced (No. of videos/ Use Cases may change depending on analysis)		- (Message) These are the different users of soil information, and these are their soil information needs.

WP 3 Szent István University	➤ Documentation and dissemination of SIS indicators	Videos, Webinars	All stakeholders and general public	- 1 mailing list set up - 2 webinars organised - 1 video and 1 flyer produced, documenting SIS indicators				- (Message) These are the key Soil Information indicators that will populate the SIS. - (Question) Are there other useful indicators not covered in this list?
	➤ Developing SIS Methodology	Webinars	- Project Regional hubs in the 5 zones - Field coordinators and researchers	- 2 webinars organised in Methodology, for regional hubs, field coordinators, and researchers				- (Message) This are the fieldwork/ analysis methods and the underlying methodology. - (Question) What are your questions and concerns regarding the methods/ methodology?
		Mailing list discussions	All stakeholders and general public	- Email list discussions (exact numbers to be determined during project inception period)				- (Question) Are there gaps/ scope for improvement in the methods/ methodology?
WP 4 (International Institute of Tropical Agriculture (IITA) + 5 Regional hubs	➤ Field Campaign and Capacity Building	Field manuals (video and flyers)	- Regional hubs - Field coordinators and researchers	- videos and flyers produced, outlining the field campaign methodology (exact numbers to be determined during project inception period)				- Scientific considerations behind methodology design - Key findings from the stakeholder identification process
		Field manuals (video and flyers)	- Regional hubs - Field coordinators and researchers	- videos and flyers produced, outlining the field campaign methodology (exact numbers to be determined during project inception period)				- Outline of the field campaign, sample collection processes - Do's and Dont's for field workers - Online questionnaires developed for use in field data collection and tabulation
		Webinars instructing field researchers on field data and soil sample collection	- Regional hubs - Field coordinators and researchers	- 1 webinar organised				- Outline of the field campaign, sample collection processes - Do's and Dont's for field workers (webinar will add value over videos and flyer by allowing for interaction between field researchers and regional hubs/ IITA)
WP 5 Agricultural Research Council (ARC)	➤ Soil Analysis and Capacity Building	- Webinars on laboratory protocols	- ARC - Regional hubs	- 1 webinar conducted, outlining laboratory protocols				- Explanation of the laboratory protocols - Questions/ Feedback on laboratory protocols
		- Laboratory protocol manuals (Videos and flyers)	- ARC - Regional hubs	- videos and flyers produced, outlining laboratory protocols (exact				- Explanation of the laboratory protocols - Spectroscopy guidelines and calibrations (not yet existing for South Africa)

<p>WP 6 ISRIC</p>				<i>numbers to be determined during project inception period)</i>				
		- Peer-reviewed journal articles	Scientific community	- At least 1 article published in a peer-reviewed journal				- Scientific considerations behind laboratory protocols
	➤ Building Soil Information System	- Videos, to serve as user manuals for the SIS	- Identified stakeholders - Project partners - General public - Scope A Horizon2020 projects	- videos produced, explaining how to use the SIS (exact numbers to be determined during project inception period)				- Instructions for using the SIS
		- Hackathons (to validate Beta versions of the SIS)	- Identified stakeholders - Young soil scientists - ICT application developers - General Public	- 1 hackathons organised				- (Message) The SIS is an open-source tool, designed for use by the public - Instructions for using the SIS - (Question) What are some of the possible innovative applications of the SIS? - (Question) Are there any gaps/ scope for improvement in the SIS?
		- Peer-reviewed journal articles	Scientific community	- At least 1 article published in a peer-reviewed journal				- Scientific concerns underlying the design and construction of the SIS
<p>Actions pertinent across Work Packages</p>		- Developing project logo - Project website - Social media presence such as a LinkedIn group - E-mail list		- Project logo developed - Project website functional - Project social media channels established and functional - E-mail list set up, moderated by designated project staff				- Updates on new developments in the project

Table 2: Plan for Exploitation, Dissemination and Communication, of Activities and Results: Months 1-17 (Work Package 2)

	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	APR '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21	Oct '21	
ACTIVITY 2.1: IDENTIFICATION OF RELEVANT STAKEHOLDRES																		
ACTIVITY 2.3: REGULAR ENGAGEMENT OF STAKEHOLDERS																		
S4A Partners meeting for validation of WP2 strategy and methodology				█														
Organise webinar with Horizon 2020 Scope A projects					█													
Organise Stakeholders Workshop								█					█					
Support organizing of side events at Africa-level Congresses													█				█	
ACTIVITY 2.2.: DEVELOPING USE CASES AND IDENTIFYING INDICATORS																		
Preparation, finalization of form for online and offline survey of Potential SIS Users				█														
Outreach of questionnaire					█													
Interview of 10 Select Stakeholders					█	█												
Analysis of questionnaire/ interview responses; draft Use Cases prepared						█												
S4A Partners meeting for validation of Use Cases and SIS indicators							█											
Making Use Cases videos								█	█	█								

Table 3: Key Activities for Exploitation, Dissemination and Communication, of Activities and Results: Project-Level (not relevant to one specific Work Package) Months 1-17

	Jun '20	Jul '20	Aug '20	Sep '20	Oct '20	Nov '20	Dec '20	Jan '21	Feb '21	Mar '21	APR '21	May '21	Jun '21	Jul '21	Aug '21	Sep '21	Oct '21
Developing project logo																	
Developing project website																	
French Version of the website																	
Setting up project newsletter																	
Make introductory video of the project																	
Outreach to general audience through social media and newsletter																	

Table 4: Content Calendar for different dissemination platforms of the project

Date	Content	Website	Social Media	Newsletter	Target	Status
01/10/2020	Newsletter signup campaign launched	News item; signup form embedded on website	Posts announcing newsletter	N.A.	All Stakeholders	
10/10/2020	Launch of Stakeholders' form	News item	Link to news item on site	Message urging recipients to participate in the survey	Potential SIS users	
30/10/2020	Project Video (launch)	Video embedded in Videos Section	Link to YouTube video	Message announcing video launch	General audience	
30/11/2020	Write-up about linkage between SIS and other Scope A projects	Hosts writeup	Link to write up on site	Message linking to write up	Project Partners; EU Stakeholders	
05/12/2020	Project video replug for World Soil Day	x	Link to YouTube video	Message articulating SIS objective and its relevance to better soil management	General audience	
20/12/2021	Announcing selected indicators	News item	Link to news item on site	Message linking to news item	Project partners; Stakeholders from Soil sector	
20/01/2020	Announcing Use Cases	News item/ documents	Link to news item on site	Message linking to news item	Project partners; Stakeholders from Soil sector	
01/02/2021	Stakeholder workshop report summary	News item	Link to news item on site	Message linking to news item	Project Partners	
20/02/2021	Use Case Video/s	Video	Posts on social media as and when videos ready	Message linking to YouTube video and playlist	All Stakeholders, including general audience	

20/03/2021	Use Case Video/s	Video	''	''	All Stakeholders, including general audience	
20/04/2021	Use Case Video/s	Video	''	''	All Stakeholders, including general audience	
20/05/2021	Announcement of participation in Africa-level Congresses (June)	News item write-up	Facebook post (incl images); Links to news item on site	Message announcing participation	General audience	
20/06/2021	Announcing launch of field campaigns	News item write-up	Facebook post (incl images); Links to news item on site	Message linking to site	Project Partners; EU Stakeholders; Soil Sector organisations	
20/07/2021	Report of activities in Africa-level Congresses (June)	News item write-up	Facebook post (incl images); Links to news item on site	Message linking to site	Project Partners; EU	
20/08/2021	Report of Stakeholders Workshop (June)	News item write-up	Link to news item on site	Message linking to site	Project partners	