



United Nations Industrial Development Organization

Climate Technology Centre & Network

Federal Ministry of Environment - Department of Climate Change

Federal Ministry of Science, Technology and Innovation – Department of Environmental Sciences and Technology

**Technology Needs Assessment and associated action plan for climate change mitigation and adaptation in Nigeria's most vulnerable economic sectors**

Dissemination Strategy

Version 1.0

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## 1. Context

Despite having a more diverse economy in recent years, Nigeria still faces a number of development and climate challenges. Nigeria has submitted its Third National Communication (TNC) to the UNFCCC in March 2020, after its First Biennial Update Report (BUR1) in 2018, and its NDC in 2015. These documents clearly highlight the challenges in mitigation and adaptation met by the country. Given these challenges, Nigeria has requested the support of Climate Technology Centre and Network (CTCN) and United Nations Industrial Development Organization (UNIDO) for the development of a Technology Needs Assessment (TNA) and associated action plan for climate change mitigation and adaptation.

The comprehensive TNA and associated action plan for climate change mitigation and adaptation enables Nigeria to meet its climate change mitigation and adaptation priorities and targets, as well as provide the guidance required by Nigeria in developing its climate finance pipeline. These documents will be used by Nigeria to implement its climate action plans, and to propose financing requests toward climate finance sources such as the Green Climate Fund (GCF). To ensure that men and women can benefit equally from actions set out in the TNA and that gender inequalities in activities and outcomes are reduced or eliminated, gender differences including different needs, priorities and interests, were considered throughout the entire TNA process and its outcomes.

For Nigeria’s TNA, the three priority sectors were selected in the inception workshop led by the Federal Ministry of Science, Technology and Innovation (FMSTI), in collaboration with Federal Ministry of Environment’s Department of Climate Change (FMEnv – DCC) in September 2018. As a result, the three prioritized sectors are agriculture and land use, energy, and industry. The three priority sectors are not only key in addressing Nigeria’s development challenges but are also climate-sensitive and vulnerable to the impacts of climate change. Consequently, the sub-sectors were selected from these three priority sectors.

Consequently, the sub-sectors were also identified from the three priority sectors, after a holistic review of climate change priorities of the country, which included NDC and other relevant documents. After identified, sub-sectors were pre-scored by the consulting team using a set of criteria to assist the actual selection and prioritization process by the key stakeholders. Eventually, the prioritized sub-sectors were confirmed with consensus from the TNA Committee: crop production, livestock production, forestry, energy supply, energy demand, energy efficiency, agribusiness and agro-allied sectors, solid minerals and metals, construction and manufacturing.

This was followed by the development of longlist of technologies, as well as mitigation and adaptation reports, which identified potential technologies that may be deployed in Nigeria in order to achieve the country’s climate change targets. The technologies were then evaluated and scored based on following criteria: (a) potential impact on climate change mitigation/greenhouse gas emissions reduction, (b) potential impact on climate change adaptation, (c) alignment with climate change policies and priorities, (d) consideration of co-benefits (environmental, social, and economic), (e) technological constraints, and (f) readiness of Nigeria for the technology. The scoring results were reviewed and discussed by the stakeholders during the regional workshops and finalized in the validation workshop on August 1st, 2022. The final prioritized technologies are summarized in the following table:

List of Prioritized Technologies for the Technology Needs Assessment

Sector	Sub-sector	Technology
Agriculture and land use	Crop production	1. Climate Smart Agriculture (including drip irrigation)

		<ol style="list-style-type: none"> <li>2. Agricultural biotechnology (including crop diversification and new varieties)</li> <li>3. Integrated Climate Change Monitoring and Early Warning System</li> </ol>
	Livestock production	<ol style="list-style-type: none"> <li>1. Selective breeding via controlled mating</li> <li>2. Manure management</li> <li>3. Livestock disease management</li> </ol>
	Forestry	<ol style="list-style-type: none"> <li>1. Agroforestry</li> <li>2. Forest management techniques for mitigation (REDD+)</li> <li>3. Ecosystem-based adaptation</li> </ol>
Energy	Electricity supply	<ol style="list-style-type: none"> <li>1. Solar PV/Concentrated Solar Power (Solar Thermal)</li> <li>2. Waste-to-energy (biomass power generation)</li> <li>3. Carbon Capture and Storage</li> </ol>
	Energy demand	<ol style="list-style-type: none"> <li>1. Improved cookstoves</li> <li>2. Demand-side management</li> <li>3. Smart grid</li> </ol>
	Energy efficiency	<ol style="list-style-type: none"> <li>1. Energy management systems</li> <li>2. Energy efficient buildings</li> <li>3. Energy efficiency standards and labels</li> </ol>
Industry and commerce	Agribusiness and agro-allied sectors	<ol style="list-style-type: none"> <li>1. Modular palm oil mills</li> <li>2. Anaerobic digesters</li> </ol>
	Solid minerals and metals	<ol style="list-style-type: none"> <li>1. Use of alternative fuels</li> <li>2. Advanced grinding technologies</li> <li>3. Unhydrated cement recycling</li> </ol>
	Construction and manufacturing	<ol style="list-style-type: none"> <li>1. Shifting to renewable sources for electricity</li> <li>2. Disaster-resilient buildings</li> <li>3. Zero energy buildings</li> </ol>

## 2. Purpose, objective and gender mainstreaming of the dissemination strategy

The purpose of this dissemination strategy report is to disseminate the TAP and associated activities so that the prioritized technologies will be implemented and embedded in the country so that they will contribute to the country's NDC.

To this end, the objectives of this dissemination strategy report are to raise awareness of the TAP, inform the citizen of its activities and expected outcomes, engage all the stakeholders, and promote the information, outcomes and results of the TAP and associated activities. It ensures that the TAP reaches to the appropriate target audiences, at appropriate timing via appropriate methods. Sharing and communicating the TAP will help the stakeholders making the right decision to succeed in disseminating the prioritized technologies and therefore it will help minimize delays in implementation. Furthermore, the dissemination strategy will contribute to create enabling environment that facilitates the TAP by developing understanding and getting public endorsement towards the TAP and the prioritized technologies.

In addition, the dissemination of the TAP and associated activities needs to consider and apply a gender perspective throughout the dissemination to effectively communicate all stakeholders. Women and men have different roles and responsibilities in the society or in the households, and thus have different experiences and needs. Therefore, one dissemination tool may

effectively communicate men but not women, or the other way around. Furthermore, the access to resources, information and opportunities may be limited for certain groups of stakeholders, such as women and members of other marginalized groups.

Gender mainstreaming, therefore, is necessary to ensure addressing all stakeholders in an equal and inclusive manner to convey necessary information among every member of the stakeholders.

### 3. Concept of dissemination and dissemination targets

Generally, dissemination can be considered as a process of understanding and engaging with target audiences to facilitate their commitment to sustainable change. Rather than one-off event, dissemination is a series of events and continuous approach. In the context of the TNA and this dissemination strategy report, dissemination is defined as follows:

- Dissemination as raising awareness of the TAP
- Dissemination as telling others about ideas/concepts of potential projects to implement the prioritized technologies and activities
- Dissemination as sharing outcomes that previously performed
- Dissemination as spreading and embedding impact
- Dissemination as an ongoing two-way process aimed at bringing about change

The target audiences for this dissemination strategy report are expected to cover all potential stakeholders of the TAP. They can be grouped into three target groups, namely, a targeted adopter, a change enabler and an end user.

- Targeted adopter: People with whom the TAP, a project or technology seeks to engage and to whom outcomes of the TAP, a project or technology are transferred for the purpose of change.
- Change enabler: People who can increase the likelihood of embedding, upscaling, and sustainability of outcomes of the TAP, prioritized technologies, and activities.
- End-user: People for whom the intervention is designed.

### 4. Dissemination approach

The dissemination strategy report suggests taking a two-step approach so that the TAP, prioritized technologies, and proposed activities will be effectively disseminated among the right targets. The dissemination strategy report will support the stakeholders to be familiarized with climate change impacts, technicality of each prioritized technology, benefits and challenges to be considered upon adopting the technologies. In so doing, the dissemination strategy will support the country to achieve its NDC through adopting, implementing, and disseminating the technologies identified in the process of the TNA.

The recommended two-step approach consists of the following steps.

The first step is to identify players exhaustively in a target sector. Players in this step means any institutions, organizations, entities, or individuals who are potentially anticipated to be involved into the dissemination of a technology in any kind of form. More superficially, the players include, but not limited to, governmental intuitions (at national, regional and/or municipal level), civil organizations, communities/individuals, technology/service venders, capital providers, academia, and international/regional development partners, among others.

The players will have impacts on the dissemination of a technology directly or indirectly. Therefore, their involvement or cooperation will be essential, sometime indispensable, to ensure



an effective and efficient dissemination of a technology. In this sense, the first step aims at identifying the players exhaustively in a target sector. The examples of methods for the identification includes, but not limited to, mapping potential players in a certain technology market, creating a long list of technology/service vendors, and identifying administrative roles and responsibilities of governmental institutions.

The second step is identifying the characteristic described earlier (e.g., target adopter, change enabler, or end-user) for each player. The intention of this step lies at identifying an effective communication tool, timing, and contents to disseminate the TAP and related information depending on characteristic of the players. In so doing, the exhaustive identification at the first step will provide a baseline information to conduct the second step. This step will allow to provide necessary information depending on each player's need and interest when they consider if they would like to be involved in a dissemination of a technology. For instance, a player identified as a change enabler who provide a facility for a certain technology may need more information on technicality and regulation standards for quality of a facility, rather than climate change adaptation/mitigation benefit that the facility may provide. In that case, it is more suitable to adopt dissemination tools that can convey detailed technical information (e.g., scientific articles, experts' conference etc.) rather than tools conveying simple and impactful message (e.g., media release, social networking services etc.)

In addition to the two-step approach proposed, this report also suggests assessing the climate of each target audience. The assessment of the climate means assessing and identifying the degree of and/or readiness for understanding of target audience towards the TAP, prioritised technologies, and associated information. Thus, it will supplement information for deciding dissemination tools, timing, frequency, content design, among others that will ensure effective dissemination.

The recommended two-step approach can, therefore, effectively disseminate the TAP and related information that will promote dissemination of the technologies and implementation of projects to proliferate the technologies in various communities of the country.

## 5. Dissemination tools

Variety of dissemination tools are available. Each tool has advantages and disadvantages when communicating the target groups, thus it is important to understand their characteristics, benefits, and shortages and to select an appropriate tool for the dissemination. The options of tools are described in the following.

### 5.1. Branding

The process of creating and promoting a project's brand or identity to raise public awareness of the project is known as branding. Given how much information the potential adopters and other stakeholders are exposed to everyday, this is very crucial. To ensure that awareness transforms into deeper participation, branding must be combined with other actions since it does not, by itself, boost people's comprehension of the initiative. With branding, stakeholders can promote project more quickly and establish a distinctive project identity.

Branding activities include developing a logo, using colors consistently, making items like pamphlets, posters, badges, and magnets, and coming up with a short, memorable project name.

### 5.2. Email lists, discussion forums, and other social networking tools

Online communication tools, such as email lists, discussion forums, and social networking sites, offer chances to interact with specific potential adopters, to publicize project's activities, and to encourage dialogue among likeminded, project-interested individuals, and project stakeholders.



On some occasion, it might be more appropriate to utilize an existing "community" for communication rather than to develop a new forum/community just for the initiatives related to the TAP. For instance, rather than building, advertising, and maintaining a new project-specific listserv, if a sector or sub-sector already has an established listserv with a sizable membership, that is usually a more effective way to reach a broad audience through email.

### 5.3. Networks and communities of practice

Utilizing current networks and communities of practice, as well as creating new ones, is one approach to engage with stakeholders throughout the project's lifespan. Rather than communication among a set of stakeholders, these address a broader range of targeted future adopters and provide the chance to connect, exchange best practices, discuss benefits and difficulties, and develop their practices and ideas. Networks and communities can involve policymakers, businesses, investors, adopting communities, individuals, and civil organisations, among others. Networks and communities can take face-to-face, online, intra- or interinstitutional style. They are assemblages of people who share a common interest.

Same as the email lists, discussion forums and other social networking tools, it is beneficial to examine the professional networks and communities of practice that have already existed in each sector to see whether they could be utilized for the TAP dissemination rather than creating a new one. If not, the establishment of communities for the TAP dissemination can foster a significant contribution to a sector, not only for the dissemination but also for the sector's development. If relevant communities of practice exist, utilizing what is currently in place might be more appropriate and time efficient.

### 5.4. Conferences

Giving a presentation at conferences can be a highly effective approach to interact with both target adopters and change enablers during the project lifespan. Conferences offer opportunities to connect various stakeholders through attending sessions in a certain sector and related cognate areas and exchanging ideas between sessions and at conference social events. Presentation about the TAP and TAP's outcomes at a conference makes those public and visible. Conferences are adequate channel for sharing and presenting information and data among relevant parties and creating awareness.

An invited keynote or refereed paper may be suited at the end of the project, while in the early phase of the project, a roundtable or a conference targeted for special interest groups might be more beneficial for creating awareness and deepening understanding among relevant parties.

### 5.5. Funding sub-projects at other institutions, mentoring and participatory dissemination

Allocating project money to sub-projects at other institutions or involving targeted future adopters in carrying out components of the project and sharing project outcomes with others are standard approaches to fostering shared ownership of project goals and achievements. Co-opting targeted potential adopters to conduct surveys and interviews, cascading engagement through participant clusters and state-based networks and offering train-the-trainer opportunities are some examples.

Project management and governance may become more complicated when the more people and institution are involved. Thus, it is important to maintain a good balance between involving others and preserving a solid project core.

Involving related parties early on to gain their inputs in the project planning would be beneficial for creating a reasonable budget for sub-projects and setting the right expectations.



#### 5.6. Guides and teaching materials

Guides and teaching materials are a great way to facilitate the transfer of technical details, benefits and challenges, results, solutions, and lessons of the TAP and prioritized technologies. Generated in print, electronic, and online formats, those guides and teaching materials offer synthesized finding and ready-to-use resources mainly to practitioners and targeted adopters on the ground. Guidelines, practitioner booklets, toolkits, good practice, teaching modules, a self-review framework, a facilitator's guide, a resource book, and Q&As are some examples of these materials.

Due to the practical nature of guides and instructional materials, they are prone to become out of date. By allowing adopters to update and customize the materials, their value and relevance could be maintained. It would be beneficial to ensure that those materials be accessible and adaptive for both current and potential users.

#### 5.7. Influencing policy

The TAP and its outcomes should be incorporated into institutional or governmental practices that are expressed in policy. Incorporating the TAP's outcomes to shape policy development can encourage continued dedication and ownership of the country. This dissemination technique has a significant potential for embedding and subsequently maintaining the TAP's implementation.

To plan this activity, it is crucial to engage with the individuals and experts with experience in policy formulation to acknowledge the dynamics and process of policy creation in the country. It is also important to examine the nature of policies that the TAP aims to affect. For instance, for some sectors it may be most suited to influencing policy change within the framework of the state or federal government, or within that of professional bodies.

#### 5.8. Journal articles and book chapters

Publishing book chapters, journal articles, or even full books is a common and effective dissemination strategy. It makes the project findings accessible to the public and adds to the body of knowledge about the subject, which in turn can have a significant impact on practice of the sector as a whole.

#### 5.9. Media releases

Utilizing media to spread the word about the project discoveries and operations can be beneficial to get citizens engaged in the discussion about the project and its goals while also preparing the environment for change. Especially, if the implementation in a sector involves a contentious topic, such as land rights, it is crucial to coordinate with the proper media personnel and make sure the right message can be sent.

There are a variety of media outlets; regional, national, and local media, radio, newspaper, TV stations, among others. It is important to select the appropriate channel so that the media release can reach to the right audience. Setting up a news alert for items relevant to the TAP using an online tool can also be helpful. This makes it easier to determine the level of interest from the media, time media releases effectively, and keep track of any uninvited references of the project in media outlets.

#### 5.10. Meetings, discussions, roundtables and invited presentations

Since the TAP implementation requires good coordination among various stakeholders, especially among various change enablers, opportunities to talk about the project ideas for the TAP with colleagues across a sector is beneficial. The TAP's steering committee members might be invited (or arrange to be invited) to a gathering that has already been planned to discuss the TAP's objectives and goals, or meetings might be called specifically to do so. Internal meetings



within public sector organizations, professional organizations, inter-organizational meetings among project participants and various change enablers, and those with accrediting bodies are some examples of activities. Creating and periodically reviewing a meeting schedule for the duration of the project will be needed too in order to secure mentoring and monitoring opportunities.

#### 5.11. Newsletters

Regular interaction with selected target adopters, change enablers, end-users and others interested in the project via newsletters is a useful dissemination method. It also allows to proceed with planned project activities and, in some cases, to review and document progress.

The amount of information, the progress of the project, and the time and resources to take to publish articles and other content needs to be considered to determine the posting frequency that makes sense for each project. Building an extensive email list for the newsletter that includes all the stakeholders the project has interacted with could be helpful. It is also important to make sure the recipients are informed of the process for opting out of receiving the newsletter should they choose to do so.

#### 5.12. Project conferences, workshops, showcases and forums

Hosting large or small, one-off or recurring, centralized or distributed gatherings provides an opportunity to share projects and foster engagement at key points throughout the project lifecycle. Successful planning of a project event relies on responsiveness to target audiences, effective event management, and thoughtful decisions about location, schedule, program, and collaboration. It is important to carefully consider the purpose of the gathering during the planning. Events tend to be resource intensive for both the organizer and the attendees, so it is crucial to make sure the goals are clear enough to make the investment worthwhile. Also, it is important to hosting the events where accessible to attendees across the country. It may be helpful to organize and promote project events alongside existing activities in related areas.

#### 5.13. Project final report

The final project report is a dissemination activity that concludes the formal phase of the project. The final reports can remain available on the relevant website and can be read, scrutinized and searched by potential adopters and change enablers. The final report is aimed at those who want to influence and assess the project's legitimacy, design, and results. It can be properly designed to provide a permanent record.

#### 5.14. Webpages, online repositories, audio-visual material, and other online content

Online publishing of material - such as podcasts, blogs, video clips, webpages and repositories - is a common dissemination tool. The advantages of the online publishing include that content is globally available, able to be shared, and updatable by members of the project team. It is beneficial to use search optimisation to increase the chances of people finding TAP related contents when they search for key words.

Working closely with online content specialists of the implementing organizations can offer guidance on decisions regarding hosting, design, content, searchability, accessibility, and other important considerations.

The following table also describes the effectiveness of each dissemination tool depending on the three characteristics of the target groups.

Effectiveness of dissemination tools par dissemination group

Dissemination tool	Target adopter	Change enabler	End-user
Branding	High	High	Medium
Email lists, discussion forums and other social networking tools	High	Medium	Medium
Networks and communities of practice	High	High	High
Conferences	High	High	Low
Funding sub-projects at other institutions, mentoring and participatory dissemination	Medium	High	Low
Guides and teaching materials	High	High	High
Influencing policy	Medium	High	Low
Journal articles and book chapters	High	Medium	Low
Media releases	Medium	Medium	High
Meetings, discussions, roundtables and invited presentations	High	High	Low
Newsletters	Medium	Medium	Low
Project conferences, workshops, showcases and forums	High	High	Low
Project final report	High	Medium	Low
Webpages, online repositories, audio-visual material, and other online content	High	High	High

## 6. Recommendations

When considering an effective dissemination, this report suggests taking the two-step approach as detailed earlier. Based on the approach, this section describes recommendations about effective dissemination depending on the characteristics of the stakeholders along with a project phase.

The TAP generally categorizes stakeholders in to five main categories, namely public sectors, capital providers, technology/service providers, communities/households/individuals, and civil organizations. Given these five categories of the stakeholders and the three dissemination target groups (e.g., Target Adopter, Change Enabler, and End-Use), the characteristics of each stakeholder can be summarized in the following table. However, it is worth noting that the following table only shows one of possible classifications. Different classifications are possible, and stakeholders can be classified in more than two target groups at the same time.

Classification of five stakeholders into three dissemination target groups

Stakeholders	Target Adopter	Change Enabler	End-user
<i>Public sectors</i>	Yes	Yes	-
<i>Capital Providers</i>	-	Yes	-
<i>Technology/service providers</i>	Yes	Yes	-
<i>Communities, Households, Individuals</i>	Yes	-	Yes
<i>Civil Organizations</i>	Yes	Yes	-

Public sector stakeholders are expected to build enabling environment for the diffusion of technology and therefore categorized as a Change Enabler. As creating enabling environment for technology diffusion requires coordinated efforts among various public sector actors and policy makers, they are requested to be engaged from the planning phase of a TAP dissemination and/or project implementation for a technology to have their championship in each institution as well as to gain their inputs to design feasible implementation plans. In some cases, public sector stakeholders can be a Target Adopter when they lead an implementation of a technology requiring elements such as regulation setting and policy making.

Capital providers are generally considered as a Change Enabler, as they will provide financial means to realize the dissemination of the TAP and/or a technology implementation project. However, the involvement of capital providers will vary depending on a target technology and financial model of a project. For instance, the involvement of private capital provider is anticipated to be minimal when financial/capital returns are hardly expected under conventional business models. Public capital private, in contrast, might be interested even in a project with minimal financial returns. Furthermore, capital providers act as a change enabler not only by providing capital directly for a specific project but also bringing in other private sector actors for the success of technology diffusion by providing financial guarantee or assurance. Given the critical importance of capital for enabling the dissemination of the TAP and technologies, the dissemination needs to address capital providers at early stage. For instance, for the case of a project disseminating a technology, the dissemination towards them needs to take place from the planning phase so that various business models and financial options to be explored to leverage their investment.

Technology and service providers act as both a Change Enabler and a Target Adaptor. They can be a change enabler when they present solutions, technologies, services, or ideas that will inform other stakeholders the possibility of project development facilitating the diffusion of the TAP and technologies. By creating/presenting innovative solutions, they can create an enabling environment for different stakeholders who would like to implement technologies. For some technology, their involvement of planning phase is necessary to integrate their input into the implementation design. Also, technology/service providers can carry out technical demonstrations and knowledge building activities which deepens other target adopters and end-users' understanding on technology and expected outcomes. Thus, their involvement during a project can be effective as well.

In addition, technology and service providers also act as a target adaptor, when they deploy a technology by themselves. Furthermore, they may initiate a Research and Development activity as they see business opportunities in a certain sector or for a certain technology. Their



involvement of early phase is, therefore, necessary as they are a part of the TAP dissemination and technology implementation.

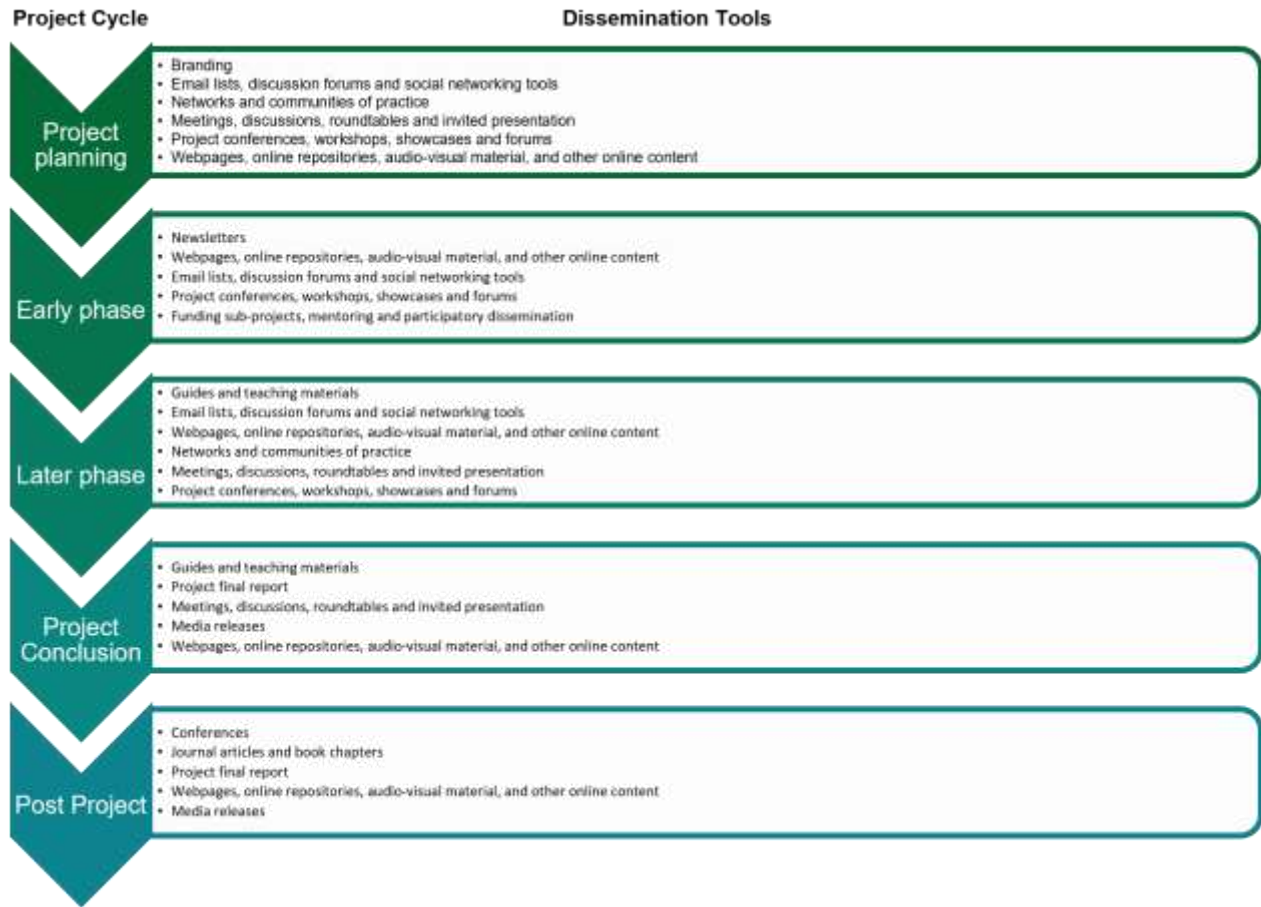
Communities, households and individuals act as an End-User and a Targeted Adopter. For instance, for the technologies in the agriculture sector, community groups or farmers associations would be a target adapter who will be a focal point to promote the technologies, while individual farmers will be end-users of the technologies. Furthermore, each household can be end-user of some of the technologies in the energy sector and contribute to the dissemination of the technologies by participating in the value chain via their payment of energy bills. When households and individuals are identified as an end-user, communication pertaining the dissemination of the TAP and technologies takes place at planning, implementation, and post implementation phases. In contrast, in case they are identified as a target adopter, the communication tends to focus on post implementation phase of a technology to ensure embedding it.

Civil Organizations generally act as a Change Enabler and a Target Adaptor. In many cases, they have detailed knowledge on a local context, a target sector as well as a technicality of a technology. Furthermore, they tend to be able to communicate directly local stakeholders who will potentially be a target adopter and end-user, thus their involvement can facilitate the dissemination of the TAP and associated activities. In this sense, civil organizations are anticipated to be a change enabler. When identified as a change enabler, the dissemination of the TAP is recommended to take place at planning phase or even earlier to planning in order to facilitate involvement of other stakeholders. In addition, the dissemination at post implementation phase can be effective to sustain and embed outcomes of technology deployment longer period of time.

Due to their expertise, they are also capable to act as a target adaptor leading deployment of the technologies and activities identified in the TAP. In this case, the dissemination of the TAP is recommended to take place at planning phase, to ensure that their involvement will be aligned with the objectives of the TAP, even when they already possess knowledge of technicality and local context.

For enabling conceptualization of the dissemination in an actual context, the following figure describes effective dissemination tools at different phases of a project implementation cycle.

Figure: Recommended dissemination tools at each project phase



Given the recommended approach, tools and timing of the dissemination of the TAP and technologies, the following tables recommends dissemination tools depending on the prioritised technologies. It is worth noting that the recommendations do not exclude other ways of dissemination.



6.1. Recommended dissemination for the technologies in the agriculture and land use sector

Stakeholder	Public Sector	Capital Provider	Technology and Service Venders	Community, Households, individuals	Civil Organizations
Designation Category	Change Enabler Target Adopter	Change Enabler	Target Adopter	Target Adopter End-user	Change Enabler
<b>Planning Phase</b>	<ul style="list-style-type: none"> <li>• Conferences</li> <li>• Influencing policy</li> <li>• Journal articles and book chapters</li> <li>• Meetings, discussions, roundtables and invited presentations</li> </ul>	<ul style="list-style-type: none"> <li>• Conferences</li> <li>• Meetings, discussions, roundtables and invited presentations</li> </ul>	<ul style="list-style-type: none"> <li>• Branding</li> <li>• Conferences</li> <li>• Meetings, discussions, roundtables and invited presentations</li> </ul>	<ul style="list-style-type: none"> <li>• Branding</li> <li>• Meetings, discussions, roundtables and invited presentations</li> </ul>	<ul style="list-style-type: none"> <li>• Conferences</li> <li>• Meetings, discussions, roundtables and invited presentations</li> </ul>
<b>Early Phase</b>	<ul style="list-style-type: none"> <li>• Media releases</li> </ul>		<ul style="list-style-type: none"> <li>• Guides and teaching materials</li> </ul>	<ul style="list-style-type: none"> <li>• Guides and teaching materials</li> </ul>	
<b>Later Phase</b>	<ul style="list-style-type: none"> <li>• Guides and teaching materials</li> <li>• Webpages, online repositories, audio-visual material, and other online content</li> <li>• Funding sub-projects at other institutions, mentoring and participatory</li> </ul>	<ul style="list-style-type: none"> <li>• Funding sub-projects at other institutions, mentoring and participatory dissemination</li> </ul>	<ul style="list-style-type: none"> <li>• Guides and teaching materials</li> <li>• Webpages, online repositories, audio-visual material, and other online content</li> </ul>	<ul style="list-style-type: none"> <li>• Guides and teaching materials</li> <li>• Webpages, online repositories, audio-visual material, and other online content</li> <li>• Networks and communities of practice</li> </ul>	



	dissemination				
<b>Project Conclusion</b>	<ul style="list-style-type: none"> <li>Project final report</li> <li>Media releases</li> <li>Project conferences, workshops, showcases and forums</li> </ul>	<ul style="list-style-type: none"> <li>Media releases</li> </ul>	<ul style="list-style-type: none"> <li>Project final report</li> </ul>	<ul style="list-style-type: none"> <li>Project final report</li> </ul>	<ul style="list-style-type: none"> <li>Project conferences, workshops, showcases and forums</li> </ul>
<b>Post Project</b>	<ul style="list-style-type: none"> <li>Project conferences, workshops, showcases and forums</li> <li>Conferences</li> </ul>			<ul style="list-style-type: none"> <li>Email lists, discussion forums and other social networking tools</li> <li>Networks and communities of practice</li> </ul>	

## 6.2. Recommended dissemination for the technologies in the energy sector

Stakeholder	Public Sector	Capital Provider	Technology and Service Venders	Community, Households, individuals	Civil Organizations
Designation Category	Change Enabler Target Adopter	Change Enabler	Target Adopter	Target Adopter End-user	Change Enabler
<b>Planning Phase</b>	<ul style="list-style-type: none"> <li>• Conferences</li> <li>• Meetings, discussions, roundtables and invited presentations</li> <li>• Influencing policy</li> <li>• Journal articles and book chapters</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>	<ul style="list-style-type: none"> <li>• Conferences</li> <li>• Meetings, discussions, roundtables and invited presentations</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>	<ul style="list-style-type: none"> <li>• Conferences</li> <li>• Meetings, discussions, roundtables and invited presentations</li> <li>• Journal articles and book chapters</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>	<ul style="list-style-type: none"> <li>• Conferences</li> <li>• Meetings, discussions, roundtables and invited presentations</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>	<ul style="list-style-type: none"> <li>• Conferences</li> <li>• Meetings, discussions, roundtables and invited presentations</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>
<b>Early Phase</b>	<ul style="list-style-type: none"> <li>• Meetings, discussions, roundtables and invited presentations</li> <li>• Guides and teaching materials</li> <li>• Influencing policy</li> <li>• Webpages, online repositories, audio-visual</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings, discussions, roundtables and invited presentations</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings, discussions, roundtables and invited presentations</li> <li>• Guides and teaching materials</li> <li>• Webpages, online repositories, audio-visual material, and</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings, discussions, roundtables and invited presentations</li> <li>• Email lists, discussion forums and other social networking tools</li> <li>• Networks and communities of practice</li> </ul>	<ul style="list-style-type: none"> <li>• Meetings, discussions, roundtables and invited presentations</li> <li>• Email lists, discussion forums and other social networking tools</li> <li>• Networks and communities of practice</li> </ul>

	material, and other online content		other online content	<ul style="list-style-type: none"> <li>Guides and teaching materials</li> <li>Funding sub-projects at other institutions, mentoring and participatory dissemination</li> <li>Webpages, online repositories, audio-visual material, and other online content</li> </ul>	<ul style="list-style-type: none"> <li>Guides and teaching materials</li> <li>Funding sub-projects at other institutions, mentoring and participatory dissemination</li> <li>Webpages, online repositories, audio-visual material, and other online content</li> </ul>
<b>Later Phase</b>	<ul style="list-style-type: none"> <li>Meetings, discussions, roundtables and invited presentations</li> </ul>	<ul style="list-style-type: none"> <li></li> </ul>	<ul style="list-style-type: none"> <li>Meetings, discussions, roundtables and invited presentations</li> </ul>	<ul style="list-style-type: none"> <li>Meetings, discussions, roundtables and invited presentations</li> <li>Webpages, online repositories, audio-visual material, and other online content</li> </ul>	<ul style="list-style-type: none"> <li>Meetings, discussions, roundtables and invited presentations</li> <li>Webpages, online repositories, audio-visual material, and other online content</li> </ul>
<b>Project Conclusion</b>	<ul style="list-style-type: none"> <li>Media releases</li> <li>Project final report</li> </ul>	<ul style="list-style-type: none"> <li>Media releases</li> <li>Project final report</li> </ul>	<ul style="list-style-type: none"> <li>Project final report</li> </ul>	<ul style="list-style-type: none"> <li>Media releases</li> <li>Project final report</li> </ul>	<ul style="list-style-type: none"> <li>Media releases</li> <li>Project final report</li> </ul>
<b>Post Project</b>	<ul style="list-style-type: none"> <li>Project conferences, workshops, showcases and forums</li> </ul>			<ul style="list-style-type: none"> <li>Email lists, discussion forums and other social networking tools</li> </ul>	<ul style="list-style-type: none"> <li>Email lists, discussion forums and other social networking tools</li> </ul>

	<ul style="list-style-type: none"> <li>Influencing policy</li> </ul>			<ul style="list-style-type: none"> <li>Project conferences, workshops, showcases and forums</li> <li>Webpages, online repositories, audio-visual material, and other online content</li> </ul>	<ul style="list-style-type: none"> <li>Project conferences, workshops, showcases and forums</li> </ul> <p>Webpages, online repositories, audio-visual material, and other online content</p>
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6.3. Recommended dissemination for the technologies in the industry and commerce sector

Stakeholder	Public Sector	Capital Provider	Technology and Service Venders	Community, Households, individuals	Civil Organizations
Designation Category	Change Enabler Target Adopter	Change Enabler	Target Adopter	Target Adopter End-user	Change Enabler
<b>Planning Phase</b>	<ul style="list-style-type: none"> <li>Branding</li> <li>Conferences</li> <li>Influencing policy</li> </ul>	<ul style="list-style-type: none"> <li>Branding</li> <li>Conferences</li> </ul>	<ul style="list-style-type: none"> <li>Branding</li> <li>Conferences</li> <li>Guides and teaching materials</li> <li>Meetings, discussions, roundtables and invited presentations</li> </ul>	<ul style="list-style-type: none"> <li>Branding</li> <li>Email lists, discussion forums and other social networking tools</li> </ul>	<ul style="list-style-type: none"> <li>Email lists, discussion forums and other social networking tools</li> <li>Meetings, discussions, roundtables and invited presentations</li> </ul>
<b>Early Phase</b>	<ul style="list-style-type: none"> <li>Funding sub-projects at other institutions, mentoring and participatory dissemination</li> <li>Guides and teaching materials</li> </ul>	<ul style="list-style-type: none"> <li>Funding sub-projects at other institutions, mentoring and participatory dissemination</li> <li>Guides and teaching materials</li> </ul>		<ul style="list-style-type: none"> <li>Guides and teaching materials</li> <li>Meetings, discussions, roundtables and invited presentations</li> <li>Networks and communities of practice</li> <li>Funding sub-projects at other institutions, mentoring and participatory dissemination</li> </ul>	<ul style="list-style-type: none"> <li>Networks and communities of practice</li> </ul>
<b>Later Phase</b>	•	•	•	• Networks and	•



				communities of practice	
<b>Project Conclusion</b>	<ul style="list-style-type: none"> <li>• Media releases</li> <li>• Project final report</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>	<ul style="list-style-type: none"> <li>• Media releases</li> <li>• Project final report</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>	<ul style="list-style-type: none"> <li>• Media releases</li> <li>• Project final report</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>	<ul style="list-style-type: none"> <li>• Media releases</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>	<ul style="list-style-type: none"> <li>• Media releases</li> <li>• Project final report</li> <li>• Project conferences, workshops, showcases and forums</li> </ul>
<b>Post Project</b>	<ul style="list-style-type: none"> <li>• Influencing policy</li> <li>• Branding</li> <li>• Conferences</li> </ul>		<ul style="list-style-type: none"> <li>• Branding</li> <li>• Conferences</li> <li>Newsletters</li> </ul>	<ul style="list-style-type: none"> <li>• Networks and communities of practice</li> <li>• Webpages, online repositories, audio-visual material, and other online content</li> </ul>	<ul style="list-style-type: none"> <li>• Networks and communities of practice</li> <li>• Webpages, online repositories, audio-visual material, and other online content</li> <li>• Branding</li> <li>Conferences</li> </ul>