

# Theory of change associated with Short Initiatives and TEAM projects

## 1. Context & problem analysis

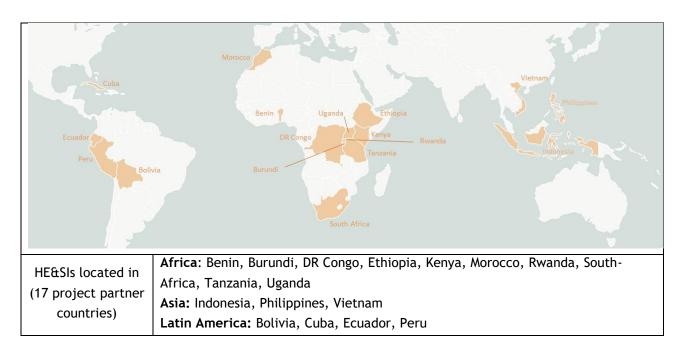
As highlighted in chapter two of the thematic Joint Strategic Framework on Higher Education and Science for Sustainable Development (tJSF HES4SD), there is an increasing consensus on the role of strong higher education institutions and systems in addressing sustainable development challenges. Through their threefold mission, Higher Education and Science Institutions (HE&SIs) play a key role in achieving the 2030 Agenda for Sustainable Development (SD) and the 17 Sustainable Development Goals (SGDs) aiming to end poverty, protect the planet, foster gender equality, defend and promote cultures and cultural understanding, and ensure prosperity for all. In this respect, the Global Sustainable Development Report [40] calls upon all stakeholders to facilitate multidirectional collaboration in science and (transfer of) technology for achieving the SDGs. It considers academic and scientific capacity strengthening and partnerships as one of the four main levers for achieving the 2030 Agenda and implies a strengthened link between Higher Education and Science Institutions, governments, civil society organisations and the private sector (the quadruple helix). Furthermore, the 2019 UN Global Sustainable Development Report highlights the indispensable role of HE&SIs in the creation, exchange and transfer of knowledge to inform the achievement of six systemic transformations for sustainable development, namely (1) human well-being and capabilities, (2) sustainable and just economies, (3) food systems and nutrition patterns, (4) energy decarbonisation with universal access, (5) urban and peri-urban development and (6) global environmental commons. Each of the six transformations is synergistic with others and constitutes an entry point into the underlying systems needed for the achievement of the Agenda 2030. The framework underscores the need for complexity-oriented, crosssectoral and holistic approaches that pay due attention to the integrated nature of the 2030 Agenda and the positive and negative interlinkages between the goals.

In Flanders and elsewhere, HE&SIs are increasingly acknowledging their pivotal role in contributing to the necessary changes for the global goal of sustainable development. HE offers disciplinary and transdisciplinary teaching and research and HE&SIs generate and contribute to the development of new and innovative approaches to global, regional and local issues. Through research, HE&SIs play a unique role, as drivers of change, by producing new knowledge and innovation to address global challenges, by transferring knowledge through training, by providing evidence for informed (public) policy and implementation, and by knowledge mobilisation. Through teaching, universities develop generations of new leaders and skilled professionals who will drive sustainable development. HE&SIs provide lifelong learning, and train today's students, decision-makers and professionals to think both critically and ethically, to learn to cope with ethical dilemmas and apply systems-thinking approaches to serious and complex societal problems. HE&SIs have also taken up a central role in the provision of global citizenship education to nurture a global understanding, intercultural awareness and values that enable students to assume active roles in resolving global challenges. Through service delivery and community engagement, HE&SIs work with a rich variety of stakeholders including governments, the private sector, and civil society - for local, national, regional and global impact. As such, higher education has a direct impact on the development of every country. The 2030 Agenda for Sustainable Development will not be achieved without partnerships with and contributions from HE&SIs.

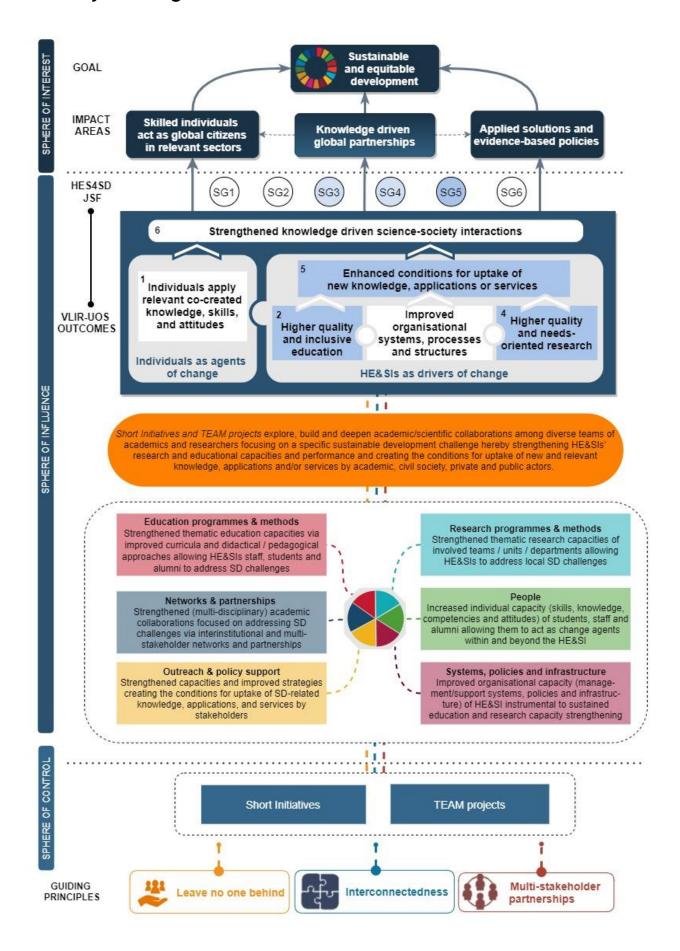
Globally, however, HE&SIs and their stakeholders (i.e. staff, students and alumni) still face challenges among others in terms of access, capacity and uptake to unlock the full potential of higher education for

sustainable development. Scholarship programmes and global partnerships in the field of higher education are considered essential in mitigating various of these challenges. They offer opportunities to improve the quality of teaching and research, strengthen the organisational capacities of higher education institutions, foster political and economic relationships through their scholars, mitigate financial and capacity constraints and accommodate the growing demand for equitable access to higher education services.

In line with Belgium's ambition to concentrate development efforts in a limited number of partner countries to ensure sustainable and effective results, the VLIR-UOS programme 2022-2026 aligns with the country list presented as part of the thematic JSF HES4SD. More precisely, within the framework of Short Initiatives and TEAM projects teams from Flemish HEIs collaborate with one or more teams from HE&SIs located in the following 17 partner countries. The divergence in the progress towards the achievement of the SDGs and the remaining challenges in terms of access and participation in higher education as well as a succinct stakeholder analysis for the HE sector in these countries are presented in the contextualized country reference frameworks (annex 17).



## 2. Theory of change



#### 2.1. Generic objectives of SI and TEAM projects

VLIR-UOS considers global engagement for higher education as a goal (SDG 4: Quality Education) and a means for attaining other SDGs through knowledge co-creation, transfer and valorisation. In the long run, Short Initiatives and TEAM projects are expected to contribute to more sustainable and equitable development by fostering:

- Application of solutions and evidence-based policies
- A global community of skilled individuals who act as global citizens in relevant sectors
- Knowledge-driven global partnerships

The first impact area relates to the role of higher education in contributing to innovation and the valorisation and application of new knowledge, insights and evidence for sustainable development. Effective partnerships are deemed conducive to ensure engagement of relevant stakeholders and creation of opportunities for uptake that can lead to a broader application of this new knowledge by end-users. This can include policymakers applying evidence from research in their policies, local communities adapting new practices that address their local needs, private companies adapting innovative approaches, etc.

The second impact area aligns with the evidence provided in the UN Global Sustainability report 2019 which highlights the potential of HE&SIs to develop through their teaching generations of new leaders and skilled professionals. These skilled individuals are expected to drive social and economic development through their contributions in relevant sectors. As critical global citizens they are likely to have a multiplier development effect because of (i) their capacity to understand and question global power structures, communicate and work/study effectively outside one's environment, (ii) their consideration of interdependence and social concern for others and (iii) their civic engagement in the form of pro-environmental and pro-social behaviour [49]. Moreover, the realization of this impact area can equally benefit from the strengthened partnerships (see impact area 3) that facilitate the creation of networks between tomorrow's change agents and leaders and the in-flow of strengthened human capital in the labour market.

The third impact area draws upon the idea that reciprocal partnerships are essential in safeguarding knowledge co-creation, exchange and uptake within and beyond the scope of the supported projects. In line with SDG 17, VLIR-UOS aims for sustainable, effective, and efficient partnerships at various levels, including the individual, institutional, country, and regional levels. Additionally, the partnerships may involve academic actors (e.g. Higher Education Institutes) as well as other societal players (e.g. private companies, policy makers, civil society organisations). VLIR-UOS further believes that HE&SIs might have a multiplier effect on other HE&SIs in the country or region. As such, the strengthened partnerships are instrumental in achieving the other impact areas but can also directly contribute to the goal of sustainable and equitable development.

#### 2.2. Specific objective of SI and TEAM projects

The specific objective of *Short Initiatives and TEAM projects* is to explore, build and deepen academic/scientific collaborations among diverse teams of academics and researchers focusing on a specific sustainable development challenge hereby strengthening HE&SIs' research and educational capacities and performance and creating the conditions for uptake of new and relevant knowledge, applications and/or services by academic, civil society, private and public actors.

To effectively contribute to this objective, VLIR-UOS focuses on two strategic axes:

• Enabling HE&SIs to strengthen and take up their role as Drivers of Change

Enabling individuals to act as Agents of Change

Both strategic axes can reinforce one another. For instance, the extent to which HE&SIs take up their role as development actor is likely to affect the embedded scholarship students' development of knowledge, skills and attitudes that should enable them to effectively act as agents of change within and beyond the setting of the HE&SI.

Along these strategic axes, VLIR-UOS identifies six outcomes, namely:

- (1) Individuals apply relevant co-created knowledge, skills, and attitudes. This outcome indicates the co-creation and transfer of state-of-the-art knowledge and skills to individuals who then apply these in their own organisation. The skills and knowledge also include critical thinking, global citizenship skills and attitudes, leadership skills, etc.
- (2) HE&SIs provide higher quality and more inclusive education. This outcome concerns the improved quality and inclusiveness of education resulting from strengthened educational capacities available at HE&SIs.
- (3) HE&SIs make use of improved organisational systems, processes, and structures. This outcome was formulated to highlight the importance of organisational capacity of HE&SIs in enabling changes in terms of research and education capacities (see impact evaluation of UDC [21]). It encompasses improved organisational processes (e.g. ICT/digitalisation), support systems (e.g. quality assurance) and structures as well as human capacities that contribute to HE&SIs' enhanced institutional performance.
- (4) **HE&SIs conduct higher quality and needs-oriented research.** This outcome reflects the VLIR-UOS strive to strengthen research capacities in order to enable HE&SIs to develop higher quality and needs-oriented research processes and results. This outcome signifies HE&SIs becoming (more) research active and innovative and being enabled to produce solutions to local and global challenges. It also refers to research which is gender sensitive and equity focused as a means for achieving excellence in research.
- (5) **HE&SIs create enhanced conditions for uptake of new knowledge, applications or services.** VLIR-UOS identifies this outcome to refer to the production of new knowledge, applications and services and the creation of conditions for uptake by relevant external stakeholders. It may involve strategic, uptake-oriented stakeholder management, targeted dissemination, and capacity strengthening of end-users (or intermediaries).
- (6) HE&SIs and their stakeholders engage in knowledge driven science-society interactions. This outcome responds to the growing awareness of the importance of the science-society interface which has been identified as a weakness in recent VLIR-UOS evaluations. It reflects the VLIR-UOS ambition to support networks, partnerships or platforms which can constitute an eco-system where academic (HE&SI's staff, students and alumni) and non-academic stakeholders (policymakers, ANGCs, donor organisations, private sector, embassies etc.) interact to facilitate the valorisation and uptake of knowledge.

SI and TEAM projects particularly aim at contributing to VLIR-UOS outcomes (2) higher quality and more inclusive education, (4) higher quality and needs-oriented research and (5) improved conditions for uptake of new knowledge, applications or services. While it is not VLIR-UOS intention to impose restrictions on individual projects, all SI and TEAM projects are mandated to ensure that their change process contributes to the enhanced conditions for uptake of the knowledge, applications or services generated in relation to the specific developmental challenge the project aims to address (VLIR-UOS outcome 5).

The SI and TEAM projects may, however, differ in the relative importance and nature of alignment with the VLIR-UOS outcomes. Given their shorter time horizon, Short Initiatives typically focus less on research and education capacity strengthening compared to TEAM projects which focus on solid capacity building via structural research and/or educational cooperation. For instance, Short Initiatives centred on exploration or valorisation can additionally seek to contribute to a strengthened knowledge-driven science-society interface (VLIR-UOS outcome 6). Similarly, TEAM projects can pursue improved organisational systems, processes and structures (VLIR-UOS outcome 3) if this is deemed instrumental in tackling the sustainable development challenge on which the project focuses. Thus, besides VLIR-UOS outcome 5, individual projects may choose to focus on a sub-selection depending on priorities and needs of local stakeholders. Yet, projects are required to document their choices through their project-specific Theory of Change to ensure alignment with the programme's vision towards change as set out in this document.

Finally, the SI and TEAM projects strongly align with the strategic goals put forward by the thematic JSF HES4SD. In particular, the Strategic Goal (SG) concerning the *co-creation, transfer and application of relevant knowledge* (SG 5) resonates well with the aims of the SI and TEAM projects which centre on generating and creating the conditions for uptake of knowledge pertaining to a specific sustainable development challenge. In addition, SI and TEAM projects hold considerable potential to contribute to the *increased HE&SIs institutional capacity* (SG 3) and conditions that *enable HE&SIs to operate as drivers of change* (SG 4).

#### 2.3. Outputs of SI and TEAM projects

In general, SI and TEAM projects are expected to bring about outputs in six domains:

- Research programmes and methods
- · Education programmes and methods
- Outreach and policy support
- People
- Systems, policies and infrastructure
- Networks and partnerships

The table below presents a non-exhaustive and indicative list of deliverables and activities that individual projects can undertake within the six domains through partnerships between HE&SIs and other local, national or global stakeholders (see section 3). The deliverables, processes and changes in these domains are interlinked and not mutually exclusive. Thereby, it is important to keep in mind that expectations in relation to these domains should vary for SI and TEAM projects in view of their distinct scope (in terms of time and budget). Furthermore, three types of SI projects can be distinguished, namely explorative/innovative projects, stand-alone projects focused on practice-based research or educational development and valorisation projects. The finality, needs, and priorities of the individual projects will therefore determine the way and extent to which projects focus on and devote resources to activities in each of the domains.

Domain	General description	Outcome specific	Activities (examples)
Domain	(VLIR-UOS ToC)	desired change	· · · ·
Research programmes and methods	Improved (interdisciplinary) methodologies and strengthened quality and relevance of research to allow for better knowledge management and high-quality research results serving societal needs	Strengthened thematic research capacities of involved teams/ units/ departments allowing HE&SIs to address local sustainable development challenges	Research components are developed and implemented to contribute to developmental change in the region, especially for vulnerable groups in society (*).  Examples:  New knowledge and technologies are developed on sustainable development relevant topics, responding to local needs (prioritizing vulnerable groups *)  High quality research publications and training manuals for academic use are produced, contributing to increased research output and university reputation  Gender balanced participation is promoted in research programmes  Research takes into account the impact on gender issues (how the results positively/negatively impact men/women) and environment  Integration of new research methods, training lab techniques in optimized research practices  Improved data collection methods and analysis techniques  Practice-based research leading to an improvement/innovation in the professional practice/work field (e.g. university colleges projects)
Education programmes and methods	Improved, innovative and inclusive teaching methods, didactics, and digital approaches. Improved curriculum content to support knowledge co-creation and equip students with the necessary skills and knowledge ensuring their employability after graduation and ability to tackle global challenges from a holistic, interdisciplinary perspective	Strengthened thematic ed- ucation capacities of in- volved teams/ units/ de- partments via improved curricula and didacti- cal/pedagogical ap- proaches and methodolo- gies allowing HE&SIs staff, students and alumni to ad- dress sustainable develop- ment challenges	<ul> <li>(research-based) Educational components are developed and implemented to contribute to developmental change in the region, especially for vulnerable groups in society (*).</li> <li>Updated Master programmes are implemented</li> <li>New courses were included in the curricula</li> <li>New trainings were developed for academic and non-academic stakeholders (e.g. in hospitals, child care centers) of mentors for trainees (students) in order to enhance the work placement/internship of students (e.g. Flemish university colleges and partner HE&amp;SIs and workplaces)</li> <li>New didactical, pedagogic and teaching methodologies are introduced, adapted and implemented by staff</li> <li>Research-based educational programmes are developed and implemented, connecting MSc students to research</li> <li>Courses and trainings content created with improved integration of equity and equality, e.g. gender concepts, intersectionality, inclusion, (implicit) bias,</li> <li>STEM-programmes are promoted among female students</li> </ul>

			Examples:
		Strengthened capacities and improved strategies creating the conditions for uptake of SD-related knowledge, applications, and services by local communities, public/private/civil society organisations and other stakeholders	Activities to facilitate and contribute to the use of research evidence by policymakers, pri-
			vate sector, civil society and other development actors
			Guidelines are developed and made available for uptake by stakeholders (with attention for
			gender issues related to uptake by women and men)
	Enhanced interaction with		• Collaboration in spin offs, commercialisation of new knowledge products, registration of IP, pilot initiatives
Outreach and	relevant public, private and academic stakeholders		Policy briefs are published for policy advice
	to share knowledge, cre-		Stakeholder engagement strategies are developed
policy support	ate the conditions for up- take and provide policy advice/support		Platform for regular exchanges with stakeholders (incl. women/vulnerable groups)
			Demonstration workshops for stakeholders are organised (participation of women is pro-
			moted)
			• Improved scientific communication methods and strategies to share results with broader audience
			<ul> <li>Seminars with industry, government agencies and development partners are organised on a</li> </ul>
			regular basis 🕩
			Attendance of SD-relevant academic conference by project team members
			Organisational and institutional capacity is strengthened
			Examples:
		Improved organisational capacity (management/support systems, policies and infrastructure) of HE&SI instrumental to sustained education and research capacity strengthening	• Establishment of efficient structures, processes and procedures (e.g. introduction of lab
			procedures)
	· .		• Integration of structures, processes and procedures in the daily workflows (e.g. well-functioning lab)
			• Establishment of adequate "institutions", policies, rules and regulations (e.g. development
Systems,			of a new research/ accreditation/ HR policy, gender policy, environmental policy, technol-
policies, and			ogy transfer, a research procurement desk, Grants Directorate, Extension office, etc.)
infrastructure			Adequate policies are in place to support/improve access for students from vulnerable groups and ensure gender-balance among students and staff
			• Enforcement of rules and regulations for good governance (e.g. implementation of new re-
			search, accreditation/ HR policy,)
			Regular adaptation of institutions, rules and regulations (e.g. evaluation mechanisms for
			research, curricula, HR,)
			Improvements in the laboratory and other supporting infrastructure (library, ICT)
			Improved software technologies for data collection and analysis

People	Students, alumni, staff, researchers are trained/sensitised in a supportive learning environment to strengthen their knowledge, skills & attitudes in diverse domains (e.g. leadership, global citizenship).	Increased individual capacity (skills, knowledge, competencies and attitudes) of students, staff and alumni allowing them to act as change agents within and beyond the HE&SI	<ul> <li>Support systems such as management system, quality assurance, accounting are implemented and used</li> <li>Governance/management structures of the partner institutions are strengthened</li> <li>Measures are taken to reduce environmental impact (CO<sub>2</sub> compensation, less paper-based, limited travel, recycling, etc.)</li> <li>Upgrade of research and education facilities</li> <li>Examples:         <ul> <li>Development of adequate skills, knowledge, competencies and attitudes (e.g. PhD scholarships)</li> <li>Application of skills, knowledge, competencies on the workplace (e.g. PhD holder applies new knowledge and skills)</li> <li>Reduction of staff turnover, facilitation of skills and knowledge transfer within institutions (e.g. PhD remains staff member)</li> <li>Team building and trainings to improve collaboration spirit, leadership skills, research attitudes, communication skills</li> <li>Transversal competencies (skills, knowledge, attitudes) for becoming critical global citizens and change agents are strengthened, awareness about gender and environmental issues, human rights, global sustainability challenges. (transversal integration of global citizenship in VLIR-UOS portfolio)</li> </ul> </li> <li>Examples:</li> </ul>
Networks and partnerships	Strengthened interactions within reciprocal partnerships and engagements at local, regional and global levels between HE&SIs, researchers, staff, students and other stakeholders in society (public actors, private actors, other civil society organisations (CSOs), communities, etc.) for sustainable development	Strengthened (multi-disciplinary) academic collaborations focused on addressing sustainable development challenges via interinstitutional and multistakeholder networks and partnerships	<ul> <li>Regional and international HE cooperation on a specific topic is facilitated (e.g. joint research, exchanges, new master programme, etc.)</li> <li>Expertise is exchanged with different Flemish HEIs and partner HE&amp;SIs</li> <li>Multi-disciplinary and interconnectivity is implemented by collaborating with different teams/units/departments in the HE&amp;SI, i.e. not be limited to one department (e.g. different projects along the value chain of an agricultural product, strong complementarity &amp; synergy with other projects)</li> <li>New research partnerships with private and public actors or civil society are developed to have more societal impact and attract new funding to ensure sustainability</li> <li>A stakeholder platform concept (e.g. stakeholder advisory board) and associated stakeholder workshops are developed to build a network with local private sector, policy-makers and civil society (e.g. women groups, communities, marginalised groups)</li> <li>Alumni network events are organised to keep alumni connected to HE&amp;SIs</li> <li>Exploration of partnership potential/formulation missions (matchmaking sessions, seminars, exchange meetings)</li> </ul>

#### 2.4. Underlying hypotheses and potential risks

The outcome and its underlying change process have been elaborated drawing on evaluations organised by VLIR-UOS (e.g. the thematic mid-term evaluation on uptake), government (e.g. impact evaluation of Belgian University Development Cooperation) or other organisations (e.g. ARES, NORHED, NUFFIC), earlier experience, reflections and learning from the previous programme cycle captured through Annual Progress Reports, and scientific literature on the role of Higher Education for Sustainable Development (HEfSD). The mid-term thematic evaluation of departmental projects: 'Creating the conditions for impact'[1], and the Impact Evaluation of the Belgian University Development Cooperation [21], in particular, have provided evidence which underscores the effectiveness of the Short Initiatives (SI) and TEAM projects. Simultaneously, these evaluative reports highlight the challenge to move beyond the generation of knowledge, applications and services to realize effective uptake of research outputs. As such, they highlight the need for increased attention to knowledge valorisation and uptake in the VLIR-UOS portfolio and especially within the SI and TEAM projects.

In what follows the generic assumptions/hypotheses identified for VLIR-UOS as a non-implementing organisation facilitating and supporting individual scholarships and projects are presented. These assumptions can also be understood as risks which need to be managed at various levels. Of course, academic project owners or coordinators also identify, analyse and manage context-specific risks and assumptions at their project level using formats that are made available to them by VLIR-UOS. The hypotheses underlying the change paths from the six VLIR-UOS outcomes leading up to the ultimate goal of sustainable and equitable development are laid out in our actor ToC (see annex 14). In what follows we focus primarily on the hypotheses that underpin the causal relations between the desired changes in the core domains and the specific objective(s) of the SI and TEAM programme. More details on the identification, potential impact and management of the risks associated with the outcome are provided in annex 2.

The project outputs and outcomes generated within the six domains lead to 'HE&SIs providing higher quality and more inclusive education', because/under the hypothesis that:

- state-of the art knowledge (content-related and methodologically) and insights from research are structurally integrated in education programmes (curricula), courses and methods
- sustainable development and global perspectives are systematically integrated into education programmes (curricula), courses and methods
- didactical competences of academic staff, PhD and Bachelor/Masters students are enhanced

The project outputs and outcomes generated within the six domains lead to 'HE&SIs conducting higher quality and needs-oriented research', because/under the hypothesis that:

- methodological competencies of students (Bachelor, Master and PhD) are enhanced
- research facilities have improved
- researchers have enhanced capacities with regards to transdisciplinary research
- researchers receive methodological training in community engagement
- the quality of training for researchers has improved
- the quality (and number/focus on) academic publications and other research outputs has improved

The project outputs and outcomes generated within the six domains lead to 'improved conditions for uptake of new knowledge, applications or services', because/under the hypothesis that:

the academic team has

- o a good understanding of the broader system/context in which the project operates (e.g. structural barriers, timing of elections, budgetary cycle, ethical questions);
- a good understanding of the relevant stakeholders, potential beneficiaries and/or intermediaries;
- o a good understanding of the policy priorities;
- o received training in research communication and uptake;
- o a shared view and clear intention towards uptake.
- the research process is transdisciplinary, participatory/collaborative and involves a long-term sustainable interaction between researchers and (end-)users;
- the research/education products are relevant, needs-oriented and demand-driven, easily accessible and disseminated in a timely manner.

## 3. Stakeholder analysis

VLIR-UOS contributes to the 2030 agenda by realizing a societal impact, implying an impact on local communities, civil society, governments, private sector or other higher education institutions. In what follows we list the role and the desired change among the main actors involved in the change process that VLIR-UOS envisages to support through SI and TEAM projects. More contextualized stakeholder analyses can be consulted in the country reference frameworks for the VLIR-UOS project partner countries (see annex 17) and in the project proposals.

		Actor	Role, influence and interest
Sphere of (indirect) Sphere of control and direct influence	Higher Education Institutions in Flanders (incl. aca- demic promotors & ICOS)	Academic promotors and Institutional Coordinators for Development Cooperation (ICOS)/ Global Engagement Officer (GEO) of Flemish HEIs are important direct partners in the implementation and follow-up of SI/TEAM projects in collaboration with their counterparts at the partner HE&SIs. ICOS of the respective institutions are the gateway through which information from VLIR-UOS about calls, opportunities for synergy & complementarity with other stakeholders, events & capacity building activities reaches the academic community. In addition, ICOS/GEO facilitate the elaboration of the project proposals thereby stimulating interinstitutional cooperation among Flemish HEIs. Project promoters and coordinators/ICOS/GEO of the Flemish HEIs select scholarship students and offer a quality educational programme with sufficient follow up.	
	Sphere of contro	Higher Education and Science Institu- tions in partner countries	HE&SIs in partner countries are important indirect partners in the realization of SI/TEAM projects. As project owners they contribute to HE&SIs' enhanced institutional performance in the core tasks relating to education, research and societal service delivery strengthening the HE&SI's visibility and recognition as a centre of excellence. In the long-term, partner HE&SIs are expected to have a multiplier effect on the HE system and development sector in the country or region through their engagement in (global) knowledge-driven partnerships with academic and non-academic stakeholders. HE&SIs also bear a responsibility in creating decent working conditions for their staff and students.
	of (indirect)	DGD (incl. Belgian embassies in partner countries)	DGD has an advisory role in the selection commission for SI/TEAM projects and follows-up on the VLIR-UOS portfolio and the thematic JSF HES4SD. The Belgian Embassies can play a role in facilitating the uptake of knowledge, the identification, mobilisation and relation building with other stakeholders (e.g. European Union, national government, other donors), the contextual updates etc.
	Sphere	Students, professionals, and alumni	<b>Students, professionals and alumni</b> can be direct (e.g. as a recipient of a PhD scholarship within a TEAM project) or indirect beneficiaries (e.g. enjoying improved/innovative didactical approaches) of the SI/TEAM projects. As direct

		beneficiary, their changed role will be about the generation and use of newly acquired knowledge, competences (e.g. global citizenship) and networks in view of sustainable development.
	Academics, researchers, lecturers	Teams of academics/ researchers/ lecturers affiliated with Flemish and partner HE&SIs can apply for and become direct beneficiaries of the SI/TEAM project. They design/formulate, implement, and monitor the project within a particular context and play an important role in co-creating, disseminating and creating conditions for uptake of knowledge relevant to the achievement of the SDGs in line with the needs, policies and priorities of the partner HE&SIs, local/national or regional stakeholders.
	Members of the the- matic JSF on Higher Education and Sci- ence for Sustainable Development	VLIR-UOS, ITM and ARES have initiated the JSF on HESD4SD to further unlock the developmental potential of higher education and science for sustainable development and make it accessible to other local, Belgian and international partners as scientific advisor to other partners' projects, partners or policy bodies, as a platform for sharing state of the art scientific results, information, expertise and experience and for exploration of possibilities for synergy, complementarity and collective learning.
	Belgian Actors of the Non-governmen- tal Cooperation (e.g. VVOB, UCOS)	VLIR-UOS continuously tries to identify and encourage synergy and complementarity between Belgian ANGCs and academic stakeholders. These actors play a critical role in facilitating the uptake of research/education results, mobilisation of local stakeholders, participation in trainings or courses, identification and communication of relevant research questions/opportunities, hosting of international internships, facilitating student mobility Collective learning unfolding with these actors within the geographic JSFs (incl. JSF Belgium) on diverse topics (e.g. decolonisation, financial management) may assist the implementation, risk management and follow-up of SI/TEAM projects.
	Belgian bilateral co- operation (BIO & Enabel)	VLIR-UOS will regularly exchange with Enabel and BIO to identify and communicate opportunities for synergy and complementarity with academic projects of the partner HEIs (e.g. through country reference frameworks, JSF platform). Enabel can facilitate/support national governments and (indirectly) higher education systems in the country contributing to an enabling environment for HE&SIs to operate as drivers of change. Enabel will also be able to more easily tap into the expertise of Belgian HEIs and ITM and their networks through the tJSF when looking for scientific support and/or project partners.
Sphere of interest	International organi- sations and other donors	Projects undertaken by international organisations like UN agencies or international donors active in higher education cooperation (e.g. UNESCO, UNITAR, World Bank, European Commission) can be complementary in the achievement of the objectives of SI/TEAM projects. They can play a role in the uptake of new knowledge or practices or serve as seed money for bigger projects financed by these international organisations.
	Academic/science (inter)national and regional networks	Regional or (inter)national academic/science networks (e.g. CAMES, IUCEA) are among the potential indirect beneficiary as targeted HE&SIs strengthened in their research/educational capacities can improve the functioning of the networks they are part of through the co-creation, exchange and uptake of knowledge among academic stakeholders. Similar effects can be realized in the case of alumni and scholarship networks/associations when former scholarship students act as agents of change within these networks.
	Public sector: Local or central govern- ment and political community	Public sector actors are expected to engage in evidence-based governance that puts knowledge to the test by being a stakeholder in the co-creation of inclusive (innovative) solutions and effective user of research results to foster good governance for sustainable and coherent policies/development.

	Private sector	Individuals and companies who operate for profit and which are not controlled by the state can play a role within SI and TEAM projects as users of the knowledge, applications and services (co-)created as result of the project and therefore contribute in particular but not only to SDG 9 on industry, innovation and infrastructure.
	Civil society, social movements and local communities	Civil society actors, social movements and local communities are expected to cocreate, access and use the knowledge and research/education products generated within SI/TEAM projects thereby making a potential contribution to the entire range of SDGs.

### 4. SDG principles and transversal themes

The SDG principles serve as a compass in VLIR-UOS endeavour of sharing minds, changing lives. As visualised in the ToC, they are transversally integrated to render the activities and change processes SDG-proof.

Interconnectedness: VLIR-UOS recognises that given the complexity, scale and interconnectedness of current societal challenges, meaningful social, economic and ecological transformations can only be realised by starting from a holistic and integrated approach to the SDGs. More precisely, VLIR-UOS strives for holistic transformations by encouraging projects to reflect on their position in the interplay of global challenges and national needs, and to bring together the different types of expertise needed to successfully implement the project. As an essential first step in considering the complexity of societal change, all VLIR-UOS supported projects develop a holistic context analysis which moves beyond sectoral and disciplinary borders, and should analyse the positive as well as negative interlinkages between the SDG goals (see also risk analysis in annex 2).

Multi-stakeholder partnerships (MSP): The complexity, scale, and interconnectedness of the current societal challenges that the SDG framework is seeking to address, requires a concerted effort of a wide variety of different stakeholders. As such, the principle of multistakeholder partnership - which promotes cooperation and partnerships at different stages and spanning the boundaries of civil society, private sector, government, and academia - is ubiquitous across the 2030 Agenda. An analysis of academic as well as non-academic stakeholders (private sector, government, NGO/Civil Society, international donors...) is essential for each partnership. VLIR-UOS takes into account the MSP principle by promoting collaboration between different partners and stakeholders to co-create, share and mobilize knowledge and expertise across disciplines, sectors, interest groups, and borders. More precisely, VLIR-UOS explicitly puts forward the science-society interface and the importance of strengthening this. Short Initiatives and TEAM projects, in particular, are expected to seek for synergy and complementarity with various academic and non-academic stakeholders (state actors, community organisations, private sector, NGOs, ..) when generating and facilitating the uptake of the development-relevant knowledge. All individual projects are therefore required to submit a thorough stakeholder analysis and management strategy as an essential step. In addition, for TEAM projects, interinstitutional collaboration involving researchers and/or academics from several HE&SIs in the partner country and in Flanders is (financially) encouraged.

Leave no one behind: VLIR-UOS recognises the need for pro-active strategies to ensure that vulnerable and marginalised populations are included in and benefit from higher education partnerships for sustainable development. The LNOB principle is taken into account by looking at partners with whom we work, at beneficiaries for whom we work and at what we focus on in projects. VLIR-UOS encourages that projects take gender and vulnerable groups into account, by putting forward partnerships with mid-range or weaker institutions, by awarding scholarships to a diversity of beneficiaries and by promoting transformative or community-based types of research. More precisely, international top higher education

institutions are considered only when participating as supporting partners in projects, scholarship attribution is not only based on academic excellence in terms of scientific output, and mainstreaming approaches are put in place to consider inclusion and (gender) equality in each project. Short Initiatives, in particular, aim to be accessible for academics/researchers at the early stages of their academic career who are interested to explore the potential for higher education for sustainable development.

As to reach sustainable and inclusive development, SI and TEAM projects are expected to take gender and the protection of the environment and natural resources into account as transversal themes (see optional annex 20). With regards to gender, VLIR-UOS has developed a gender policy reflecting how to contribute to gender equality by mainstreaming gender in higher education for sustainable development. Upon advice of the gender expert group, VLIR-UOS and its partners engage in fixing the numbers, fixing the knowledge and fixing the organisation for gender in line with the theoretical three-fixes model of Londa Schiebinger. To operationalise this threefold strategy, guidance and tools will be offered to our partners and promotors (e.g. checklist for scholarship selection, information sheet for gender mainstreaming, training on gender analysis in research, training for selection commission members). With regards to environment, VLIR-UOS adheres to the strong and active sustainability model (also known as the Doughnut model of social and planetary boundaries) which aims to ensure meeting the needs of all people within the means of the planet. This implies that SI and TEAM project proposals and reporting formats urge project applicants to consider environment and environmental sustainability during project identification & formulation as well as to monitor and reflect upon the project's effects on the environment and the risks posed by the environment on their project. Thereby, projects should be guided by the 'do no harm' principle to prevent, reduce and control the risk of environmental harm. Further, VLIR-UOS retains the possibility to develop measures related to environment, in line with its environmental policy which will be updated during the next FYP 2022-2026. Besides integration of gender and environmental concerns within project management, the transversal themes can also feature in the projects' content. To this purpose, VLIR-UOS may consider launching project calls which primarily target projects with content focused on gender and/or environment.

In addition, VLIR-UOS identifies Digital for Development and Global Citizenship as **priority** themes which play an important role in reaching the Sustainable Development Goals. With regards to the former, VLIR-UOS considers digitalisation as a crosscutting enabler to achieve better results, not a goal in itself. Regarding global citizenship, VLIR-UOS seeks to contribute to a global community of critical, solidary global citizens that feel capacitated and motivated to act in view of sustainable development. Respect for decent work and human rights are also important policy areas for the entire VLIR-UOS portfolio and projects, calling for action to prevent and protect involved people from risks related to violations in these areas (see also annex 20).

## 5. Monitoring, evaluation, accountability and learning

In this Theory of Change we identified generic pathways of change. The principle of Management for Sustainable Development Results will guide VLIR-UOS approach to monitoring and evaluation of the change process to verify whether the assumptions hold. Given the non-implementing nature of the organisation, the evidence to determine the achievement of the envisaged change process will be collected at the level of the individual project as well as at the level of the VLIR-UOS programmes. Ex-ante, project proposals are assessed based on the context analysis, theory of change and results framework and the extent to which this adequately illustrates their envisioned contribution to the SI-TEAM objectives (see annex 12). After selection, individual projects are expected to annually report their progress towards the results via annual progress reports (APR). The results framework therefore includes standard and optional indicators linked to outputs or (short term) changes within the project domains (projects' sphere of control) as well as indicators

linked to the outcome level (projects' sphere of influence). This information feeds into the results monitoring at the VLIR-UOS programme level and further allows for close monitoring of the assumptions and progress to provide projects with evidence-based guidance on how to achieve the projects' objectives. Assumptions which are not supported by evidence can provide a valid starting point from which learning questions can be formulated to be addressed via thematic/focused mid-term and end-term final evaluations of a representative sample of SI and TEAM projects. Similar to the thematic mid-term evaluation conducted during FYP 2017-2021, this evaluation exercise is likely to focus on a subset of the six OECD/DAC evaluation criteria (e.g. coherence) and/or focus on deepening our understanding of parts of the Theory of Change (e.g. networks and partnerships in view of decolonisation). Moreover, VLIR-UOS may adapt the Theory of Change associated with the programme and subsequent calls for proposals if certain hypotheses/assumptions could not be supported by evidence. Further, the compiled information received from the individual projects feeds into the elaboration of performance scores and lessons learned. The main lessons learned will be communicated to interested stakeholders during VLIR-UOS institutional dialogue (for DGD) and the strategic dialogue of the thematic JSF on HES4SD (for members and observers of the tJSF).