



Country Reference Framework

Cuba

November 2022

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Country reference framework Cuba

Background

In FYP1 the VLIR-UOS country strategies presented the strategic niche for future VLIR-UOS cooperation in a specific country, leading to strategy-based calls for proposals. These country strategies created a framework for project formulation, but could limit project identification to geographical and/or thematic foci and/or to a limited number of partner institutions. Country strategies also aimed at enabling synergy and complementarity between VLIR-UOS projects and projects from other (Belgian) stakeholders working in that country.

In FYP2, however, we shift towards an approach whereby a country reference framework provides information rather than strategic guidance. The country reference frameworks will be used mainly to support teams of academics when identifying and formulating project proposals, by providing a context analysis focused on Agenda 2030 on Sustainable Development and the higher education sector in a given country, and by providing an overview of Belgian development actors, their ongoing projects and partners in that country in view of exploration of opportunities for synergy and complementarity.

The country reference frameworks consist of three components:

- (i) overview of VLIR-UOS projects in the country;
- (ii) context analysis focused on the Agenda 2030 framework and the higher education sector;
- (iii) overview of Belgian development actors (ANGCs involved in thematic or geographic JSFs & Enabel), their local partners and their regional/thematic focus.

The frameworks have been elaborated based on information available at the time of drafting this actor programme (1st half of 2021) and through consultations with both Flemish and local project promoters in 2020-2021, and with geographic JSFs, when applicable, to ensure relevant information for coherent project formulation is included.

Prior to the launch of competitive calls, the ANGCs active in the country/region will be invited to list a number of research themes/questions that can be addressed by HE&SIs in the framework of VLIR-UOS funded projects or scholarships. Synergy and complementarity will be integrated as an element in the selection of project proposals, more in particular when discussing the (developmental) relevance and coherence of the proposals and the extent to which the multi-stakeholder partnership principle has been reflected in the project's implementation set-up. By this mode of operation, the thematic JSF on Higher Education and Science for Sustainable Development links up with the other geographic JSFs.

Evidently, the frameworks will be updated regularly in consultation with the HEI&SI stakeholders and with the respective geographical JSFs and, where appropriate, also with ARES, and especially prior to the launch of competitive calls by VLIR-UOS, to be compatible and responsive to evolving/emerging needs and priorities of academic and development actors active in the country/region/sector.

1 VLIR-UOS in Cuba

1.1 Facts and figures projects & scholarships (2003 – 2021)



Legend

Universidad de la Habana	●	Universidad de Cienfuegos	●
Universidad Central "Marta Abreu" de las Villas	●	Universidad de Holguin	●
Universidad de Oriente	●	Universidad de Camaguey	●
Universidad "José Martí Pérez"	●	Universidad de Pinar del Río	●
Universidad Tecnológica de la Habana "José Antonio Echevarría"	●	Universidad de las Ciencias Informáticas	●
Universidad de Granada	●	Universidad Agraria de la Habana	●
Centro de Neurociencias de Cuba	●	Centro Nacional de Sanidad Agropecuaria	●
Institute of Tropical Medicine "Pedro Kouri"	●	Universidad de las Artes	●

Projects 2003-2021		
Type	Budget (€)	Number
Total	25.659.330	81
IUC	11.885.000	1
Networks	2.295.000	1
TEAM	8.438.906	27
SI	1.420.576	22
RIP	299.294	3
JOINT	404.271	3
Crosscutting	916.283	24

Projects in Five-Year Programme 2017-2021		
Type	Budget (€)	Number
Total	7.904.194	22
IUC	2.850.000	1
Networks	1.250.000	1
TEAM	3.042.452	11
SI	398.355	6
JOINT	363.387	3

Scholarships 2003-2020		
Type	Budget (€)	Number
Total	563.143	138
Short term		
Subtotal	371.081	131
ITP	153.257	24
KOI	12.219	6
REI	91.230	86
Other scholarships	114.375	15
Study		
Subtotal	192.063	7
ICP	192.063	7

Cuba is one of the key partner countries of VLIR-UOS. From 2003 to 2021 VLIR-UOS spent over € 26,1 millions in cooperation with Cuba, including a long-term Institutional University Cooperation (IUC) Programme with **Universidad Central "Marta Abreu" de las Villas (UCLV)**. The ongoing IUC partnership with the **Universidad de Oriente (UO)** and the **NETWORK ICT** led by UCLV are the cornerstones of the VLIR-UOS cooperation with Cuba, next to multiple ongoing TEAM/SI.

More detailed information can be found on our [Cuba country page](#) on the VLIR-UOS website.

1.2 Ongoing projects and future calls (2022-...)

List of projects 2022-...						
Type	Runtime	Title	Flemish promoter	Local promoter	Local institution	Total budget (FYP 2) (€)
IUC	2019-2024	Institutional University Cooperation with Universidad de Oriente (UO) (phase 2 & phase-out)	R. Vounckx (Vrije Universiteit Brussel)	T.O. Ratón	Universidad de Oriente	515.000
Subproject 1		<i>Sustainable risk management plan for biodiversity and food production in the eastern of Cuba</i>	<i>A. Cuypers (Hasselt University)</i>	<i>E. I. Alemán</i>		
Subproject 2		<i>Biomedical technologies and services for improving the medical assistance in the eastern region of Cuba</i>	<i>J. Vandemeulebroucke (Vrije Universiteit Brussel)</i>	<i>J. C. Garcia Naranjo</i>		
Subproject 3		<i>Natural Products and Pharmaceutical Services to improve the patient quality of life in Eastern Cuban Hospitals</i>	<i>P. Cos (University of Antwerp)</i>	<i>J. C. Escalona Arranz</i>		
Subproject 4		<i>Safeguards of the cultural heritage. Tools and practices for its integrated management</i>	<i>P. Meers (University of Antwerp)</i>	<i>M. V. Hernández Garrido</i>		
Subproject 5		<i>Obtaining, characterization and production of new materials and technologies for industrial systems</i>	<i>D. Vandamme (Hasselt University)</i>	<i>H. C. Sariol</i>		
Subproject 6		<i>Transversal Project: Institution-wide instruments for high performance research, innovation and technology transfer</i>	<i>R. Vounckx (Vrije Universiteit Brussel)</i>	<i>R. L. Robaina</i>		
Networks	2019-2023	Network ICT with Universidad Central "Marta Abreu" de las Villas (UCLV) (phase 2 & phase-out)	A. Nowé (Vrije Universiteit Brussel)	H.C. Enriquez	Universidad Central "Marta Abreu" de las Villas (lead). PUs: UCI, UNPR, UH, UC (and IUC Uo)	270.000

List of projects 2022-...						
Type	Runtime	Title	Flemish promoter	Local promoter	Local institution	Total budget (FYP 2) (€)
Subproject 1		Strengthening the research on ICT and its knowledge transference to the Cuban society	K. Steenhaut (Vrije Universiteit Brussel)	R. Bello Pérez		
Subproject 2		Open ICT Systems and Management (ICTSYS)	D. Roefs (Ghent University)	M. O. Dominguez		
Subproject 3		ICT supporting the educational processes and the knowledge management in higher education (ELINF)	M. Goovaerts (Hasselt University)	F. A. Ciudad Ricardo		
TEAM	2019-2022	Control of antimicrobial resistance in bacteria of animal origin in Cuba in order to improve animal and human health	P. Butaye (Ghent University)	I. Espinosa	Centro Nacional de Sanidad Agropecuaria	83.094
TEAM	2019-2022	Improving Cow Milk Production Potential by Introducing a Herd Health Management Program on Camagüey's Dairy Farms in Cuba	P. Bols (University of Antwerp)	G. Garay	Universidad de Camagüey	54.492
TEAM	2022-2027	RESTORE - Restorative processes for conflict resolution. Towards an effective implementation of restorative justice in Cuba.	Antony Pemberton (KUL)	Jorge Luis Barroso González	Universidad Central "Marta Abreu" de las	279.321
TEAM	2022-2027	Building in vitro plant biotechnology capacities for ecological sustainable production of marine phytochemical formulations against skin-	Wim Vanden Berghe (UA)	José Alfredo Herrera	Universidad de La Habana	299.946
TEAM	2022-2027	Internet4Cuba: Cost-effective wireless broadband internet for Cuban people.	Wout Joseph (UG)	Glauco Guillén Nieto	LACETEL - Research and Development Tel-	279.169
TEAM	2022-2027	In vitro mass production of "biotized" plants for sustainable food security in Cuba (BIOFOCUS)	Kris Audenaert (UG)	Kalyanne Fernández Suárez	Universidad Agraria de La Habana	299.867
TEAM	2022-2027	A Cuban platform to support the 'continuum of care' of neurodevelopmental disorders	Daniele Marinazzo (UG)	Nancy Estévez Pérez	Centro de Neurociencias de Cuba	299.994
TEAM	2022-2027	Climate-adapted production of plants with neuro-active compounds in the South-Eastern region of Cuba	Bert Brône (UH)	Gabriel Llauradó	Universidad de Oriente	299.073
SI	2022-2023	Better Digital Services for Cuba through Model-Driven Software Engineering	Monique Snoeck (KUL)	Jenny Ruiz de la Peña	Universidad de Holguín Oscar Lucero	69.367
SI	2022-2023	Development of new capacities and expertise for new and enhanced vaccine formulations	Annemieke Madder (UG)	Daniel Garcia Rivera	Universidad de La Habana	69.982

List of projects 2022-...						
Type	Runtime	Title	Flemish promoter	Local promoter	Local institution	Total budget (FYP 2) (€)
SI	2022-2023	Development of a research data management strategy in Higher Education and Research Institutes in a Latin American context	Sadia Vancauwenbergh (UH)	M. Os-. Machado Rivero	Universidad Central "Marta Abreu" de las Villas	69.828
SI	2022-2023	ViolenceStop: Protocols for the Care and Protection of Women and Children in Cuba	Lior Volinz (VUB)	Yisel Muñoz Alfonso	Universidad Central "Marta Abreu" de las	69.984
SI	2022-2023	(COVID-19 PROMPT) Toward PrecisiOn Medicine for the Prediction of Treatment response to Covid-19 in Cuba.	Nikos Deligiannis (VUB)	Evelio Gonzalez-Dalmau	Centro de Neurociencias de Cuba	69.976

Table 1 Ongoing VLIR-UOS projects that will continue in FYP II

Competitive calls for new SI,TEAM and ITP projects will be launched and announced on our website. Nationals of Cuba are eligible¹ to apply for scholarships for the International Master Programmes (ICP) and International Training Programmes (ITP).

¹ Admission requirements, application procedures and selection procedures differ across the programmes and host institutions.

2 Cuba and the 2030 Agenda for Sustainable Development

2.1 Cuba and the Sustainable Development Goals

For Cuba, the adoption of the 2030 Agenda for Sustainable Development is a commitment of the State and a national priority. The Sustainable Development Goals in Cuba 2020 marks the beginning of a Decade of Action to meet the Sustainable Development Goals (SDGs) by 2030, where the next five years will be critical.

In the recent Cuban [Voluntary National Review 2021](#) (in Spanish), Cuba went as far to institutionalise the SDGs and indicate responsible line ministries per SDG:



Cuba outlined a "National Plan for Economic and Social Development until 2030 "(PNDES 2030) in line with the SDG Agenda 2030. In the PNDES six strategic axes are established, designed under a systemic approach.

	Gobierno socialista, eficaz, eficiente y de integración social;
	Transformación productiva e inserción internacional;
	Infraestructura;
	Potencial humano, ciencia, tecnología e innovación;
	Recursos naturales y medio ambiente
	Desarrollo humano, equidad y justicia social.

These axes of the PNDES were then outlined towards the SDGs as follows:

FIGURA II.2. ARTICULACIÓN ENTRE LOS EJES ESTRATÉGICOS DEL PNDES 2030 Y LOS ODS



The above mentioned 6 Strategic Axes mainstream a gender approach, and a priority towards reducing inequalities, economic growth with zero hunger, fundamentally, integrating the three dimensions of sustainable development (economic, social and environmental). The contents of the 17 SDGs are implicit in each of the 6 Strategic Axes, being the Human development, equity and social justice axis, the one that integrates the most SDGs within its specific objectives, which shows the multidimensional nature of Cuba's development model.

Other sources on sustainable development in Cuba include information about [the UN and SDGs in Cuba](#) (in Spanish), and articles attesting the commitment of Cuba published by [the official voice of the Communist Party of Cuba Central Committee](#) (in English) and by [Juventud Rebelde Development Group](#) (in English).

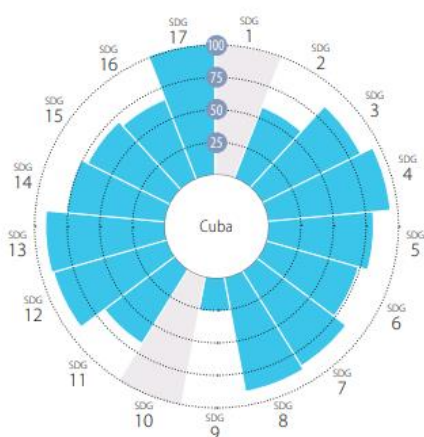
On 16 April 2019, the EU and Cuba held in Havana their first Dialogue on advancing the Sustainable Development Goals. This dialogue, which stems from the EU-Cuba Political Dialogue and Cooperation Agreement (PDCA), took stock of the progress that Cuba and the EU have made, the challenges they face and opportunities for bilateral and multilateral joint initiatives towards the Agenda 2030. The agenda

focused on the SDGs considered as most pertinent for both sides, namely, **SDG 2 (zero hunger)**, **5 (gender equality)**, **7 (sustainable energy)**, **8 (decent work and economic growth)**, **10 (reduced inequalities)** and **13 (climate change)**. It also analysed some key strategies in encouraging investments and promoting triangular and regional cooperation. Both parties agreed on shared views in the upcoming multilateral related fora. The Cuban side expressed how the negative effects of the US embargo undermined their efforts towards sustainable development. The EU restated their long standing position against the embargo and the illegal nature of its extraterritorial provisions.

Taking into account the global aspect of the SDGs, the [Sustainable Development Report](#) of 2021² assesses where each country stands with regard to achieving the SDGs. Cuba ranks 49 out of 165 countries included in the report. The [Cuba Country Profile](#) shows that 4 goals remain with main challenges and also that some goals lack information. However, Cuba is on track to cope with a number of goals and scores very well with regard to quality of education, decent work and partnerships for the goals.



▼ AVERAGE PERFORMANCE BY SDG



As an umbrella organisation that works with calls for proposals, VLIR-UOS supports interventions for and through higher education institutes, supporting them in the areas of education, research and uptake and thereby strengthening them in their role as development actor. Doing so, the impact of the interventions supported by VLIR-UOS can be found in a large variety of sectors. In line with its major intervention

² Sachs et al. (2021): The Decade of Action for the Sustainable Development Goals. Sustainable Development Report 2021. Cambridge: Cambridge University Press.

area, VLIR-UOS positions itself within the education sector, especially focused on higher education, research and innovation (SDG 4 and 9). However, through its interventions, VLIR-UOS intervenes in different sectors as well. 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. When translated into SDGs, the projects that were financed by VLIR-UOS in Cuba covered mainly, apart from SDG 4 and 9 the following SDGs 2, 3, 7, 9, 11, 13 and 15. Top sectors for VLIR-UOS in this country for the past decade are sustainable agriculture and food security, and health. However many projects were also developed in the domains of clean and efficient technologies, renewable energy, ICT for development and general research and technology development and transfer.

The **COVID-19** related health crisis and its consequences are interconnected with many domains of society. Data about the COVID-19 situation in Cuba can be found [through this link](#) and via [the following national website](#). Also the Cuban National Voluntary Review 2021 referred to before, is partly dedicated to the impact of COVID 19 on the attainment of the SDG goals.

Additional sources on progress related to higher education & science (SDG 4)

- [UNESCO-UIS](#): overview data resources indicators [related to SDG4](#)
- [Our World in data](#):
 - Indicators related to [educational mobility and inequality](#)
 - Indicators related to [tertiary education](#)
 - Indicators related to [projections of future education](#) (demand)
 - Indicators related to [science](#) and [research](#)
- [Student mobility](#): [UIS-data](#) showing shifting demand for higher education caused by COVID-19
- [COVID-19 and education](#): [UNESCO data](#) on (duration of) school closures

2.2 Higher education landscape in Cuba

The Cuban Ministry of Higher Education is the body responsible for directing, proposing, executing and controlling the state and government policy regarding higher education. This state responsibility is executed from the main functions that are reflected in the Agreement No. 4001 of the Council of Ministers. The MES system is made up of the Central Organ, which is in charge of the normative and methodological direction and the execution of State and government policy in that area, and by universities, science, technology and innovation entities and companies. It is based on a humanistic, universalized, scientific, technological, innovative, integrated and committed concept with Cuban society to build a prosperous and sustainable socialism.

The Cuban higher education (HE) system comprises 68 HEIs (not including military universities): these include 47 universities, 9 higher institutes, 8 schools/academies and 4 independent faculties. All HEIs are public. The Ministry of Higher Education (MES) is responsible for policy in matters of undergraduate and postgraduate education. It controls teaching, methodology, courses and programmes and the allocation of student places. MES is also responsible for the evaluation and accreditation of the whole university system but only 25 institutions (22 universities and 3 scientific institutions) are directly under the control of this Ministry.

Cuba has made education of their citizenry a high priority. They are proud of the fact that their education is free from cradle to grave. Individuals can attend the university system and earn as many undergraduate and graduate degrees as they might have the inclination to achieve, at no cost. Although higher education is available and free, students have to go through an interview and examination process and meet the university standards in order to be admitted.

Four basic principles underpin HE in Cuba, namely: 1) a broad profile curricula, with two leading ideas: a) the combination of instruction and education, b) a close link between studies and work; 2) continuing education in all fields of knowledge; 3) research as an integral part of the university mission; 4) university extension (that is, into the local communities) as the integrating process of university work.

Since the year 2000 significant moves have been made to **broaden access to HE for the least favored social sectors which shows in fact the commitment of Cuba with the concept of 'leaving no one behind'**. These initiatives include HEIs opening a number of university extension 'campuses' throughout all municipalities to increase access and reduce the dropout rate among working and part-time students, accompanied by investment in distance education methods and modalities. A close relationship is maintained between HE and all of Cuban society, particularly with local communities, for whom undergraduate and postgraduate programmes are offered to meet the needs of a specific productive sector or of a given region.

Research in HEIs and university research centres is required to contribute directly to Cuban socio-economic development, characterised by MES³ as requirements to produce

- Strategic results for high value-added and high-impact exportable production
- Technological developments and results that apply technology for more competitive traditional production
- Innovative technological results to develop and revitalise local and industrial economies.

³ La educación superior en Cuba. Presentation by MES at the VLIR-UOS Seminar, Havana 17th October 2011

In MES strategic planning to 2015⁴ the priority areas for institutional international cooperation match the broad national development priorities and are:

- Higher education and ICT
- Biotechnology and medical equipment
- Agribusiness and the environment
- Industry and energy
- Basic and social sciences

Also in line with national development priorities, MES places emphasis on the development of institutional capacity, doctoral programmes and research and innovation in institutions in the Eastern region of Cuba, although activities supported by international cooperation in Eastern institutions would also benefit other MES HEIs in the national network (see later in the strategy analysis). Improving skills, competences and facilities for the application of ICT within key thematic areas, such education, environmental sciences and medicine, is also a MES priority.

Academic and research collaboration, including joint curriculum development for masters course, information sharing and skills transfer, is one of the strengths of the Cuban HE system, and indeed is a mandatory requirement for MES institutions. MES HEIs are all part of a MES university network (“Reduniv”) and there are also thematic networks maintained by individual HEIs on behalf of the academic and research community, such as the “RedMa: Portal de Medio Ambiente” (an Environment portal) maintained by ISPJAE⁵.

MES provides HEIs with budget allocations for staff salaries, running costs (electricity, water etc.) and maintenance of buildings. These budgets have been declining in real terms for a number of years at the same time as the number of university sites has been expanding (for example, the development of outreach campuses and sites within municipalities).

In terms of Higher Education Institutes, [the following webometrics link](#) provides the ranking of Cuban universities worldwide. None rank in the top 2000 worldwide. No specific recommendations can be drawn from this apart from the fact that the institutions away from the Havana region and in particular in the Eastern Region of the country often received less funding. In line with its intention in strengthening university collaboration in Eastern Cuba, MES recommended stronger ties with institutions that play an important role in the sustainable development of the ‘Oriental’ provinces.

2.3 Leaving no one behind

With the adoption of the 2030 Agenda for Sustainable Development, the international community pledged to leave no one behind and to endeavour to reach the furthest behind first. The principle of leaving no one behind can be defined as a three-part imperative: to end absolute poverty in all its forms, to stop group-based discrimination that results in unequal outcomes for disadvantaged populations, and to take action to help the furthest behind.

When referring to the strategic axes, for Cuba Leaving No one Behind in fact is a principle of state. Human Development, equity and Social Justice are put forward as central concept and the principle is

⁴ *ibid*

⁵ http://redma.cujae.edu.cu/articles.php?article_id=2

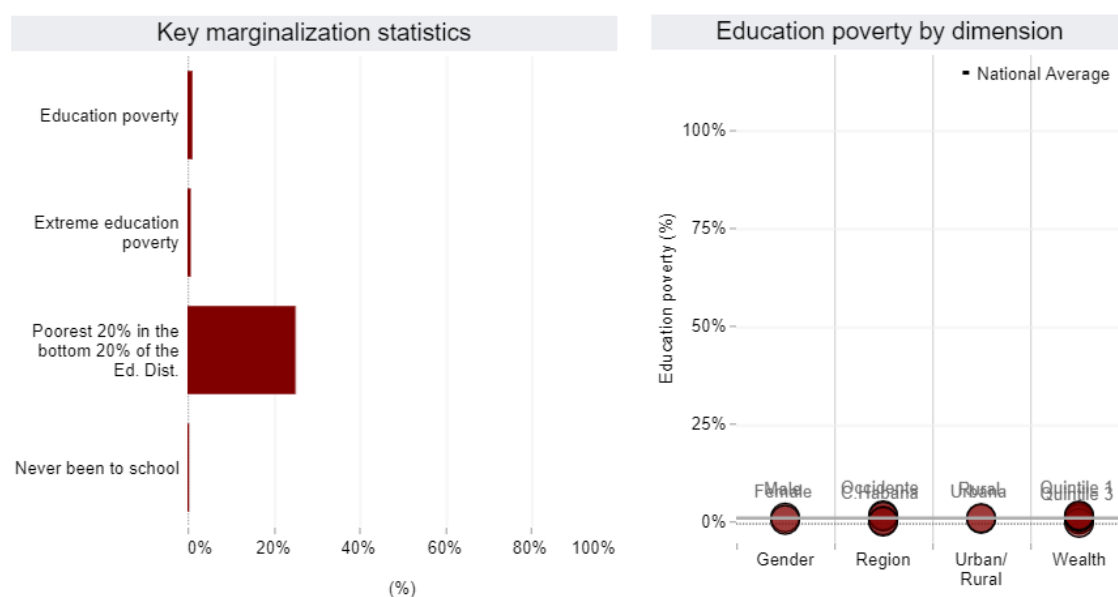
put forward in relation to the universal right to education and health and the importance of social protection, broad social services and special programmes for vulnerable groups.



The UNESCO data on [Deprivation and Marginalization in Education](#) (DME)⁶ presents the following scheme, showing challenges between the two sexes, between rural and urban, as well as between regions. However, no major differentiation can be made based on the presented numbers.

6

- Education poverty: the proportion of the population with less than 4 years of education
- Extreme education poverty: the proportion with less than 2 years
- Poorest 20% in the bottom 20% of the Ed. Dist.: what proportion of the poorest 20% are also in the bottom 20% of the education distribution
- Never been to school: what proportion of 7-16 year olds have never been to school



Additional sources on Leaving No One Behind

- Gender parity index: [school enrolment](#)
- [Global Gender Gap Report 2020](#), including country profiles
- ODI leaving no one behind index: summary [report](#) index 2019; annex [index 2019](#)
- World Inequality Database on Education: [Disparities in higher education attendance](#)
- Danish institute for human rights: [Human rights data explorer](#)

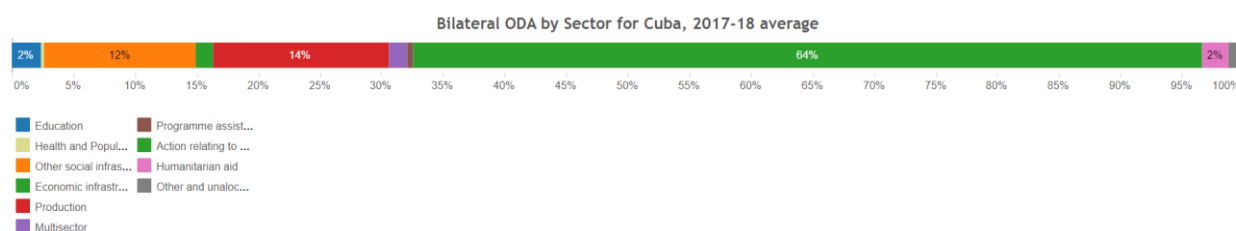
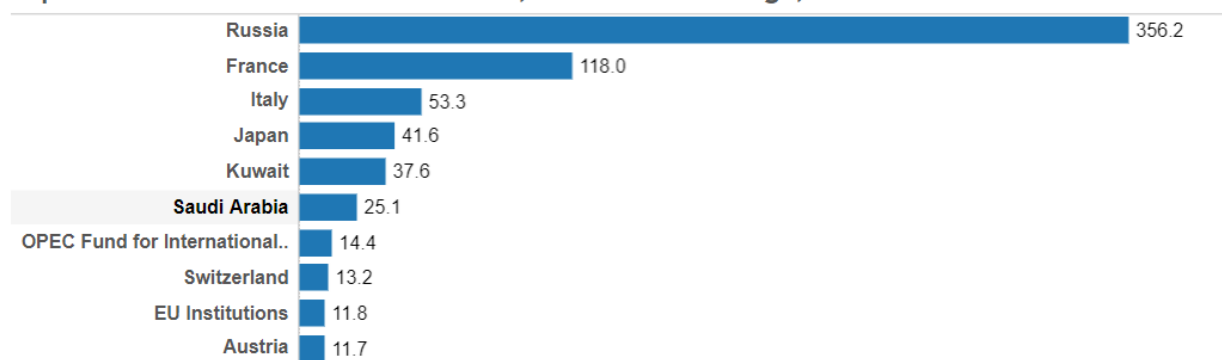
2.4 Multistakeholderpartnership - Stakeholder analysis

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 multistakeholderpartnership – 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 these stakeholders is essential for each partnership.

The universities in Cuba have as a mandate to provide extension services to society and work closely with national and provincial governments. In the context of Cuba and its economic reforms, growing attention is given to the relation with business, being in Cuba mostly state owned companies and a number of international private players as also the special economic development zone of Mariel. In this context the rules for technology transfer have been reformed and universities are adapting to this new context.

Taking a look at the **development partners** of Cuba, Russia is the main donor of gross official development aid (ODA, followed by France. The sector receiving the biggest funding is the economic infrastructure and production, quite logical for Cuba, a country suffering an economic blockade for many decades.

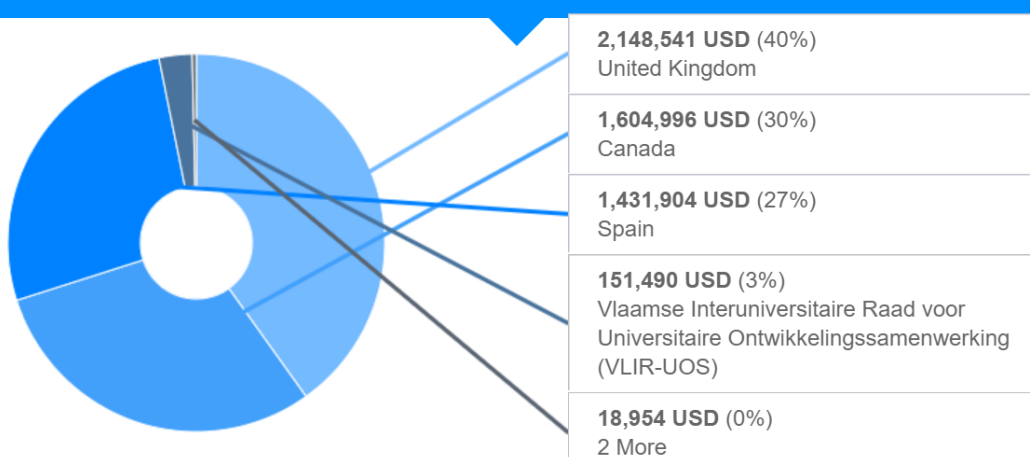
Top Ten Donors of Gross ODA for Cuba, 2017-2018 average, USD million



Source: <http://www.oecd.org/dac/financing-sustainable-development/development-finance-data/aid-at-a-glance.htm>

Based on data from the International Aid Transparency Initiative (IATI), VLIR-UOS is among the main donors in the higher education sector, however the overview is not fully correct so it seems because VLIR-UOS has maybe been the most important HE donor in recent years, maybe prior to the information upload since 2017. However, next to VLIR-UOS the UK (via the British Council), Spain and Canada are the main donors. Also DAAD has important activities.

Where does the money come from? (IATI all years)



Source: http://d-portal.org/ctrack.html?country_code=ID§or_code=11420#view=main

In fact, from the viewpoint of the Cuban Ministry of Higher Education, VLIR-UOS was acknowledged at many occasions to be the largest single international cooperation donor in HE, in terms of both funding and length of engagement with Cuban HEIs. The following countries/institutions were mentioned among the other donors to the Cuban HEIs: AECID (Spain), COSUDE (Switzerland), CIDA (Canada), DAAD,

CAPES and CNPq (Brazil) and bilateral cooperation with the higher education systems of Mexico and Venezuela as well as other member states of the Alianza Bolivariana para los Pueblos de Nuestra América (ALBA). In general, most of the international projects implemented by Cuban institutions have as main outputs the fostering of academic and scientist mobility.

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 *its interventions*.

Actor	Role and interest/influence
Higher Education Institutions in Cuba	HEIs in Cuba are important boundary partners in the realization of VLIR-UOS outcomes in terms of its contribution to Agenda 2030, and the potential contribution to local sustainable development. As project owners they are expected to contribute to HEIs' enhanced institutional performance in the core tasks relating to education, research and societal service delivery strengthening the HEI's visibility and recognition as a centre of excellence. In the long-term, partner HEIs are also expected to have a multiplier effect on the higher education system and development sector in the country or region through their engagement in (global) knowledge-driven partnerships with academic and non-academic stakeholders.
DGD (incl. Belgian embassies in partner countries)	DGD has an advisory role in the VLIR-UOS selection commissions and follows-up on the VLIR-UOS portfolio and the thematic JSF on Higher Education and Science for Sustainable Development. The Belgian Embassies (e.g. Embabel Havana) can play a role in facilitating the uptake of knowledge, the identification, mobilisation and relation building with other stakeholders (e.g. links with European Union, national government, other donors), the contextual updates etc.
Students, professionals, and alumni	Students can be direct (e.g. as a recipient of a PhD scholarship within a project) or indirect beneficiaries (e.g. enjoying improved/innovative didactical approaches) of the 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. Alumni from VLIR-UOS-projects in Cuba will be important stakeholders in connecting VLIR-UOS projects with each other, with other actors, etc.
Academics/researchers	As direct beneficiaries of the projects, academics and researchers affiliated within Flemish and partner HE&SIs 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 thematic JSF on Higher Education and Science 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 cooperation 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 and complementarity. In Cuba, all 3 actors: ITM, ARES and VLIR-UOS are present and were in fact in terms of budget the main actors in the former geographic JSF which was discontinued
Belgian Actors of the Non-governmental Cooperation	VLIR-UOS continuously tries to identify and encourage synergy and complementarity between Belgian ANGCs and academic stakeholders. Through the uptake of research 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... these actors play a critical role.
International organizations and other donors (e.g. WHO, UNESCO, World Bank, European Commission...)	Interventions undertaken by international organisations like UN agencies such as FAO or international donors active in higher education cooperation can be complementary in the achievement of the objectives of projects. They can, for instance, play a role in the use and upscaling of new knowledge or practices or serve as seed money for bigger interventions 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 government and political community	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.
State owned/Private sector	Individuals and companies who operate for profit within the boundaries of the specific Cuban situation and emerging private sector development can play a role within 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 co-create, access and use the knowledge and research products generated within the framework of <i>projects</i> thereby making a potential contribution to the entire range of SDGs.

3 Synergy and Complementarity with other (Belgian) development actors in Cuba

3.1 VLIR-UOS approaches to synergy and complementarity

Drawing upon their longstanding common history, VLIR-UOS, ARES and the Institute of Tropical Medicine (ITM) jointly developed the thematic Joint Strategic Framework on Higher Education and Science for Sustainable Development (JSF HES4SD). Through cooperation with civil society, private and public sector, the JSF initiators⁷ aim to further unlock the huge developmental potential of higher education and science cooperation for sustainable development and make it accessible to other Belgian, local and international partners, in different ways: as partner in a multi-actor partnership, as scientific advisor to other partners' projects, partners or policy bodies, as a knowledge broker for sharing state of the art scientific results, information, expertise and experience and for exploration of possibilities for synergy and complementarity. This reference framework for Cuba will feed into the **platform** that the initiators of the JSF HES4SD plan to create to proactively communicate opportunities and facilitate such cooperation. More precisely, the platform can be used to:

- (i) communicate about the launch and results of competitive calls for projects;
- (ii) communicate other opportunities for projects or scholarships;
- (iii) gather/exchange on collaboration opportunities (e.g. requests for scientific advice);
- (iv) share information about ongoing projects, events and seminars in the country/region.

3.2 Bilateral development cooperation (Enabel) in Cuba

Cuba has a longstanding history of cooperation with Belgium at level of bilateral, regional and cultural cooperation. The ranking of Belgium on [ODA with Cuba](#) is rather low at 81th for the period 2017-2021.

Cuba is no partner country of the Belgian bilateral cooperation, however the Belgian Embassy in Cuba is very present in all national and European cooperation fora and promotes intensive interactions among development actors. Currently, the support of the MYPYME, or strengthening of the small and medium enterprises that are popping up as part of the opening of the Cuban economic system, is high on the agenda but also the facilitation of calls coming from the EU local representation towards interested actors. Finally, every year the Belgian Embassy organised a Belgian cultural week culminating on the 15th of November with the Belgian day of the Dynasty.

Cuba remains an important country in the Belgian indirect development cooperation but only a limited number of Belgian actors engaged in a Belgian level country platform to promote consultation and cooperation between the non-governmental actors was established in 2016, called the Joint Strategic Framework. However, since September 2022 this formal cooperation structure was discontinued and VLIR-UOS cooperation is organised within the framework of a thematic Joint Strategic Framework on Higher Education and Science for Sustainable Development (HES4SD) in which also the French speaking sister organisation ARES and the ITM are represented. These organisations are in fact also the most important other Belgian partners in terms of synergy potential, next to the alignment with EU

⁷ The three JSF initiators represent 60 Belgian higher education institutions (HEIs), being 11 universities, 32 university colleges, 16 school of arts, and ITM.

programmers. How interaction among Belgian and European actors will continue, apart from the cooperation between ARES, ITM and VLIR-UOS, is to be seen, but the Belgian Embassy is putting a lot of efforts to continue these exchanges.

In Cuba VLIR-UOS and ARES are active in Eastern Cuba and the Havana region in domains of agricultural production and clean and efficient technologies, and ITM and VLIR-UOS are complementary in their cooperation with regard to topics related to infectious diseases and more specifically in the cooperation with IPK and Universidad de Oriente.

3.3 Belgian actors of the non-governmental cooperation in Cuba

3.3.1 Thematic Joint Strategic Framework on Higher Education and Science

	Belgian HE&SI	Partner HE&SI	Topic/thematic focus	Contact person
ARES	Haute École provinciale de Hainaut - Condorcet (HEPHC)	Cuban Research Institute on Sugarcane By-product (ICIDCA)	Production and immobilization of recombinant dextranases (DSases) using residuals of the sugarcane agroindustry (PRD 2017 – 2022)	Véronique Schmit
ARES	Université catholique de Louvain (UCLouvain)	Universidad de Guan-tanamo)	Design and Strengthening of an agroecological cacao production system in Cuba (PRD 2017 – 2022)	
ARES	Université catholique de Louvain (UCLouvain)	Universidad Central Marta Abreu de Las Villas)	Valorisation of new varieties for a sustainable production of bananas for local consumption in Cuba (PRD 2019 – 2024)	
ITM	ITM	Institute of Tropical Medicine Pedro Kourí (IPK)	Institutional Capacity Strengthening (ICS 2022 – 2026)	José Luis Peñalvo
ITM	ITM	National Institute of Hygiene, Epidemiology and Microbiology (INHEM)	Institutional Capacity Strengthening (ICS 2022 – 2026)	

3.3.2 Cuba Joint Strategic Framework and link with thematic JSFs

There is no longer a Cuba Joint Strategic Framework as of 2022.