

SCIENCE FOR HUMANITY'S GREATEST CHALLENGES

Towards a world free of poverty, hunger and environmental degradation, CGIAR is the world's largest global agricultural innovation network.

NL – CGIAR Strategic Partnership

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CGIAR Aligned with Dutch Policy and Interests



Rijksoverheid

Home > Ministeries > Ministerie van Landbouw, Natuur en Voedselkwaliteit > Documenten > Toespraak van minister Schouten (LNV) bij de FoodFIRST Conference in Utrecht, op 31 mei 2018. De tekst is alleen in het Engels beschikbaar.

Ladies and gentlemen,

If I've learned anything in life, it's that farming isn't just another job. Since becoming the Minister of Agriculture I've visited multiple farms. They can differ in many ways – dairy farms, horticultural businesses, livestock farms; small, medium or big. But they all have one thing in common: farming isn't a 9 to 5 job. Farmers are farmers, day and night. In their heart and soul. Farms are often family-owned businesses.

It's a way of life.

The work farmers do is absolutely vital. **They feed us – they feed the world.** And even though we consume their products daily, few of us know what a farmer's life is like. I'm sure that Dutch and African farmers have a lot in common in terms of their devotion to their work.

And we will rely on farmers more and more in the future.

By 2050 they'll have around ten billion people to feed. But even now, millions of people are going to bed hungry every night. In fact, the number of hungry people in the world grew from 777 million in 2015 to 816 million in 2016. And the number of malnourished people increased at a similar rate.

In order to **produce enough food**, today and in 2050, we need all the farmers we can get. But in Africa, young farmers are leaving the countryside. Farming has little to offer them.

They're moving to the city or migrating to other continents.

I hope that we can reverse this worrying trend.

A flourishing agriculture sector in Africa benefits everyone – Africans first and foremost. Between now and 2050 the number of people in Africa is expected to double: from 1.2 to 2.4 billion. A quarter of the world's population will call Africa home. And all those people will need to work and eat.

The world population as a whole also benefits from a well-functioning agricultural sector in Africa. Africa could make a substantial contribution to feeding the world.

And finally, a prosperous Africa is also an attractive sales market. That's reason enough to pool resources and invest in Africa's 'green revolution'.

Africa has the youngest population in the world. **Young Africans must see a future in farming once again.** It's not enough to simply get them interested. We also need to create the right circumstances. We need to give them the tools they need to be successful. In particular, **they need access to technology, both to improve production and combat food waste.**

This includes crops and seeds that are more resistant to **drought and saline soils.** Technologies that make precision agriculture possible, so that water and pesticides are used efficiently. But they also need tools to improve cold storage and the agri-logistics that connect farmers to markets. **Too much food is wasted.** In Sub-Saharan Africa, three quarters of food is lost during production, harvesting and processing. Three quarters!

African farmers also need access to financing that's tailored to their situation. They need policies that encourage private investment, well-functioning value chains, and access to local and international markets. And they must **unite to improve their competitiveness.**

Those are a lot of conditions. But that's what it will take to make Africa an agricultural powerhouse. Where farmers have the opportunity to put their heart and soul into their work. Day and night.

The Netherlands has a special responsibility when it comes to global food security. We are happy to **share the knowledge and expertise** we've built up over centuries with African farmers.

To this end I'll be working closely with our Minister for Foreign Trade and Development Cooperation Sigrid Kaag. My ministry also cooperates

- Farmers feed us – feed the world
- Population of 10 billion by 2050
- Increase of malnourished people
- Improve production
- Youth and a future in farming
- Access to technology and innovation
- Combat drought and saline soils
- Too much food is wasted
- Improve competitiveness
- Share knowledge and experience
- Partnerships with private sector

Addressing complex problems

Food – the way we grow, catch, transport, process, trade, and consume it – is central to the main challenges facing humanity.



FOOD SECURITY

Yield increases of staple crops have flatlined, struggling to keep pace with growing demand. Agricultural output must increase in harmony with the natural environment by improving access to quality inputs, extension services and innovations along the value chain



HEALTH

2016 saw this decade's first increase in the number of chronically undernourished, now more than 800 million people. Two billion people suffer from micronutrient deficiencies, an equal number are overweight or obese.



ENVIRONMENT

Water, land and forests are precious, yet finite, natural resources. Agriculture accounts for about 70% of global water withdrawals and is the biggest cause of forest loss. Additionally, a third of the world's soil is classified as degraded.



CLIMATE

Climate change and climate shocks put the most vulnerable people at risk. Heat, drought, flood, and unpredictable growing seasons harm farmers and production systems.



PROSPERITY

Many of the world's poor rely on agriculture and natural resources for food and livelihood. More than 85% of the world's 1.2 billion youth live in developing countries where meaningful employment and entrepreneurial opportunities are limited – contributing to migration and political insecurity.

Harnessing innovations to deliver impact

To solve these complex challenges, CGIAR partners with governments, national research institutes, civil society and the private sector on 5 global transformations.



GENOMICS REVOLUTION

To accelerate development of a new generation of crops and animals, to improve yield, as well as increase nutrient content and market value – while increasing resilience to climate challenges, pests and diseases.



NUTRITION TRANSFORMATION

To tackle chronic malnutrition, hidden hunger and the availability of safe, healthy and diverse foods by harnessing the political, technological, and market potential of food systems



ECONOMIC TRANSFORMATION

To revitalize rural economies, bring value to consumers, and leverage the power of economic growth to reduce poverty – targeting equity and the key role of women in production, post-harvest processing and across the value chain.



ENVIRONMENTAL TRANSFORMATION

To drastically cut the environmental cost of agriculture and reverse land degradation by scaling up climate-smart agriculture, and improving soil health, agroforestry practices, natural resource management and water use efficiency.



INFORMATION REVOLUTION

To deliver impact-at-scale by harnessing the power of agriculturally relevant data and analytics for farmers, businesses and governments, and to facilitate two-way information sharing for learning and decision support

The world's largest publicly funded agricultural research network



CGIAR's mega Programs and Platforms

Agri-Food Systems CGIAR Research Programs

The first of these is the innovation in Agri-Food Systems which involves adopting an integrated, agricultural systems approach to advancing productivity, sustainability, nutrition and resilience outcomes at scale.



CGIAR Research Program on Fish



CGIAR Research Program on Forests, Trees and Agroforestry



CGIAR Research Program on Grain Legumes and Dryland Cereals



CGIAR Research Program on Wheat



CGIAR Research Program on Livestock



CGIAR Research Program on Maize



CGIAR Research Program on Rice



CGIAR Research Program on Roots, Tubers and Bananas

Global Integrating Programs

The second cluster consists of four cross-cutting Global Integrating Programs framed to work closely with the Agri-Food Systems Programs within relevant agro-ecological systems.



CGIAR Research Program on Agriculture for Nutrition and Health



CGIAR Research Program on Climate Change, Agriculture and Food Security



CGIAR Research Program on Policies, Institutions, and Markets



CGIAR Research Program on Water, Land and Ecosystems

Research Support Platforms

Three research support Platforms will also underpin the research of the whole system.



CGIAR Platform for Big Data in Agriculture



CGIAR Excellence in Breeding Platform



CGIAR Genebank Platform

OUR ASSETS



15 top-class research centers

CGIAR's global network of 15 research centers contributes to an unrivaled mix of knowledge, skills and research facilities able to respond to emerging development issues.

3,000+ partners

Unequaled partnerships network of more than 3000 partners from national governments, academic institutions, global policy bodies, private companies and NGOs.

70 countries

We have a local presence in over 70 countries with a deep knowledge of customs, values and market operations in developing countries.

50 years experience

A wealth of experience and knowledge spanning 50 years that builds on a track-record of innovation and world-class research.



Working with Cambodian rice farmers to combat a plague of rodents



SeedCast – Innovative mobile app launched by IRRI to estimate seed demand for rice varieties in Odisha, India



Adaptable, productive Unica: a potato for farmers around the world



'Is my food safe?' – the state of current research on food safety



Golden Rice meets food safety standards in three global leading regulatory agencies



DNA fingerprinting to improve seed systems monitoring in Bangladesh



New pest identified in West and Central Africa!



Preserving native maize and culture in Mexico



Hunger busters: Ed Mabaya on improved seeds in Africa



How farmers can use smartphones to make crop loss assessment (The Indian Express)



Do men and women benefit equally from technology adoption? New paper explores



Helping Vietnam transform its rice sector through sustainable rice production practices



Shaking up markets and narratives for increased consumption of nutritious fonio and Bambara groundnut



Low carbon rice in Latin America: What does it take to make this happen?



South-South collaboration in tackling antimicrobial resistance in Asia

CGIAR Funders: a multilateral partnership

- Approximately US\$900 million each year
- Strong inter-Governmental support: Governments make up 95% of CGIAR System Funders
- Multi-pronged investments:
 - System-wide portfolio
 - Programmatic
 - Project
- Focus on performance, delivery, impact
- In research – critical is predictable, long term investments.
- Thank you Netherlands!



Knowledge exchange and international collaborations – ISI papers



1. WUR

2. CAAS

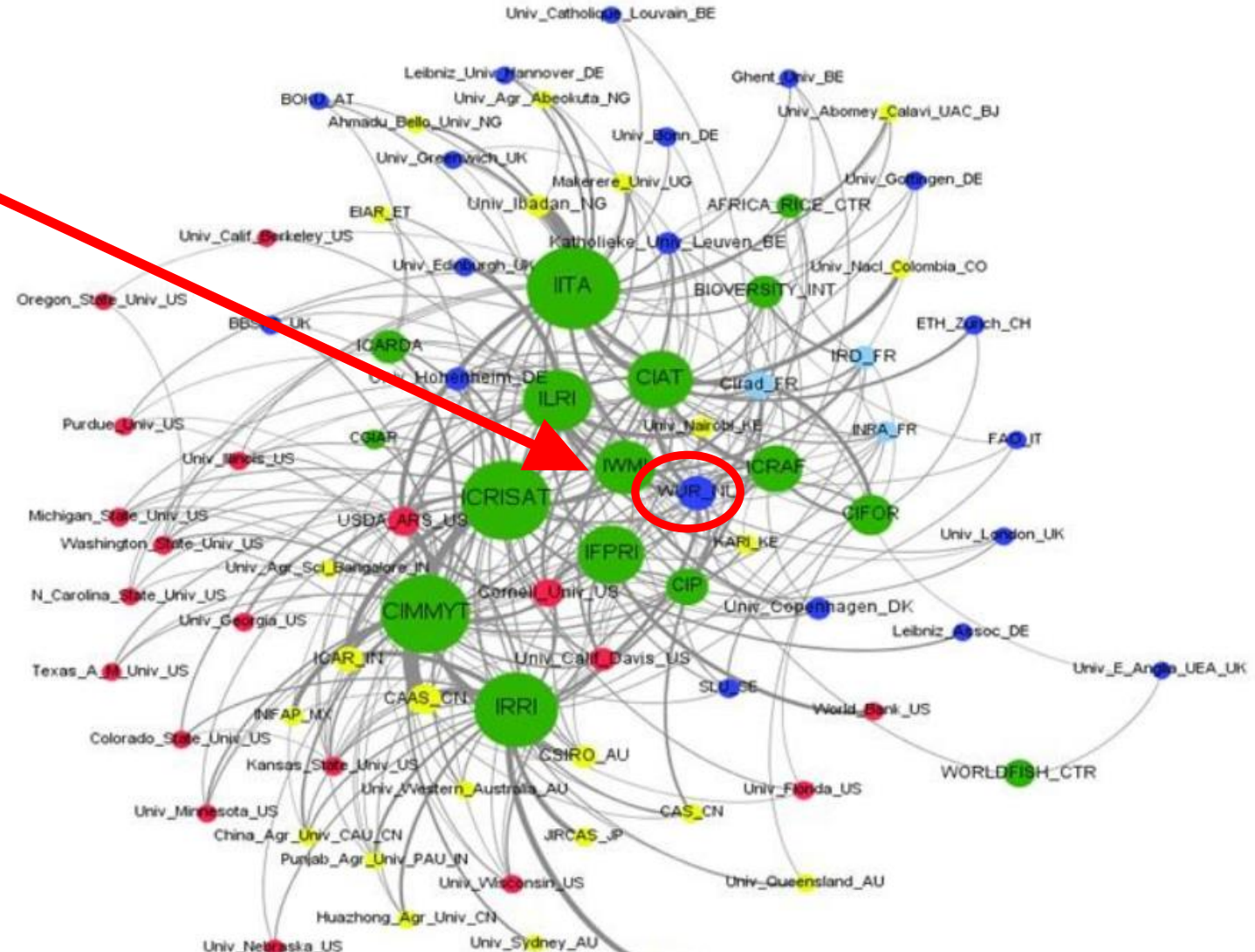
3. USDA

4. Cornell University

5. CIRAD

8. IRD

14. INRA



From “CGIAR bibliometric study, 2003-2012”, Odile Bédu (Agreenium), Dominique Fournier (INRA), December 2013

NL-CGIAR Strategic Partnership Collaborations NL - SMO

- **Specific report for partnerships** between CRPs phase 1 and Dutch knowledge institutes (July 2015)
- Design of a new **Results Based Management framework** for CGIAR R4D (3 spheres of control, influence and interest) approved at SC03 (Dec 2016)
- New set of System level indicators finalized with the approval of **common reporting indicators (9)** at SC06 Cali (Nov 2017) and being implemented for CRP/PTF reporting 2017
- **Handbook** for defining the disaggregates for these 9 reporting common indicators (Early 2018)
- NL leadership on SC gender panel for **Gender in Work Place**
- Indicators for the Dutch program on **Food & Nutrition Security**; outputs, short and long-term outcomes (Feb 2018)

Envelope 2: a programme of action

- Envelope 1 concerns the direct support to CGIAR system
- Envelope 2 to facilitate successful partnering between **CRPs, Centres, Dutch knowledge institutes and stakeholders from the public & private sector** (complementary to envelope 1)
- Envelope 2 is funded by the Dutch Ministry of Foreign Affairs and implemented by **NWO-WOTRO** (the **Netherland Organization for Scientific Research**)
 1. Senior Expert Program (SEP)
 2. Secondment of 1 PPP and Research Uptake senior expert
 3. Co-financing fund to enable Dutch knowledge institutes to liaise w/ CRPs and FPs
 4. Call for joint research proposals on Enabling an Scaling Genetic Improvement and propagation materials => **Seed System Development in Asia and Sub Saharan Africa**

<https://www.nwo.nl/en/news-and-events/news/2018/01/nl-cgiar-call-launched.html>

CGIAR Business Plan: Greater alignment with Sustainable Development Goals



The opportunity:

To align System goals and reporting to the SDGs, and improve the quality of measurement of CGIAR's contribution to the SDG targets.

The ideas:

- In a '2030 Plan', CGIAR could reformulate goals and high-level theories of change to **align** with SDG targets
- Improve **measurement** of the CGIAR contribution to SDGs, building on ongoing analysis commissioned by ISPC
- Use of SDG **metrics** in CGIAR impact assessments

CGIAR STRATEGIC GOALS



2030 TARGETS AS STATED IN CGIAR'S 2016-2030 STRATEGY AND RESULTS FRAMEWORK

- 350 million more farm households have adopted improved varieties, breeds or trees, and/or improved management practice
- 100 million people, 50% of them women, assisted in exiting poverty
- Improve the rate of yield increase for major food staples from current <2.0 to 2.5%/year
- 150 million more people, 50% of them women, meeting minimum dietary energy requirements
- 500 million more people, 50% of them women, without deficiencies of one or more of the following essential micronutrients: iron, zinc, iodine, vitamin A, folate and vitamin B12
- 33% reduction in women of reproductive age who are consuming less than the adequate number of food groups
- 20% increase in water and nutrient (inorganic, biological) use efficiency in agro-ecosystems, including through recycling and reuse
- Reduce agriculture related greenhouse gas emissions by 8 Gt CO₂-e yr⁻¹ (15%), compared with a business-as-usual scenario in 2030
- 190 million hectares (ha) degraded land area restored
- 5 million ha of forest saved from deforestation



CGIAR Business Plan: Strengthened collaboration with delivery partners



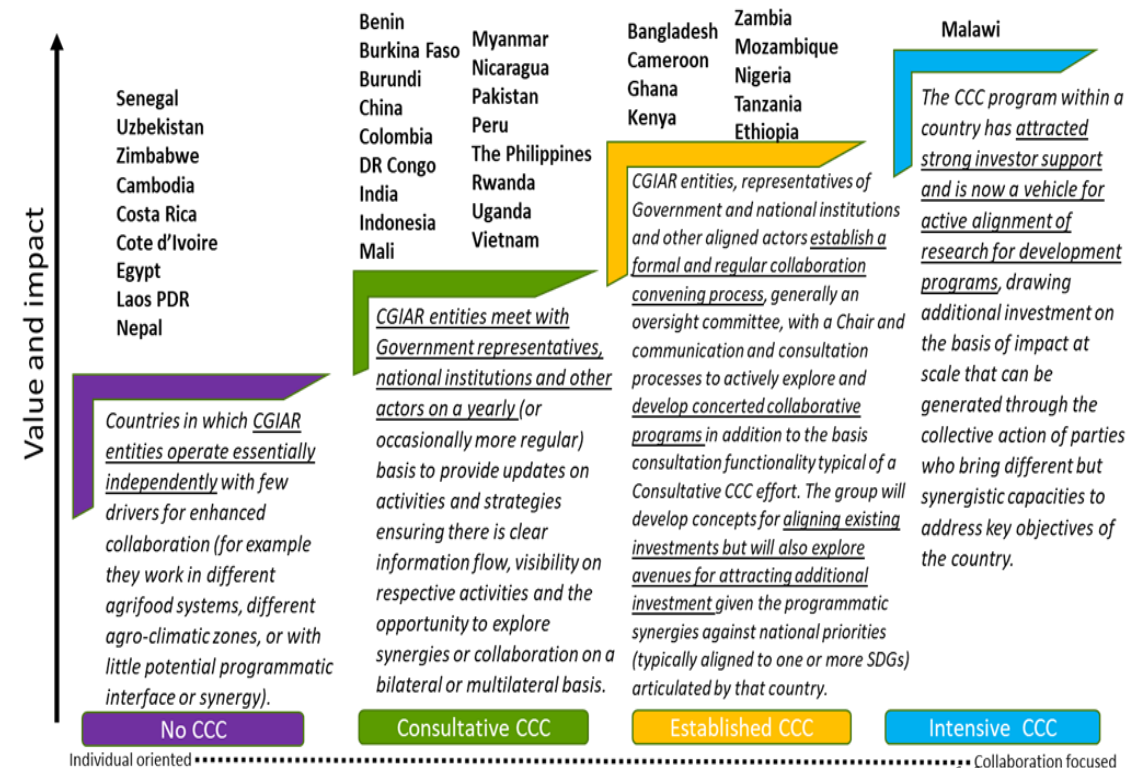
The opportunity

Increasing the reach and impact of CGIAR research activities. CGIAR is dependent on partnerships for getting its research disseminated and scaled for development impact.

The ideas

- **Private Sector collaboration:** Private sector has a significant role to play not only as an upstream partner in providing access to advanced technology, but also as a downstream partner for scaling -up and out of our research outputs.
- **Country collaboration:** Through a Country Collaboration approach, CGIAR can better aligned to key country priorities. This can create an enabling environment for other partnerships and delivery initiatives.
- **Contributing to global policy and dialogue on food security:** Increasing contribution and relevance of CGIAR in the crossroads of the global food security dialogue and with the delivery partners based on Rome.
- **Multilateral Development Bank cooperation:** Establishing structures and potential mechanism(s) for CGIAR knowledge, innovation, and tools to contribute to design, baseline, implementation, M&E of major development programs in the multilateral development banks.

The below image is a possible collaboration maturity model where collaboration efforts in particular Countries could be represented in terms of particular stages at a given time, and be used to establish collaboration aspirations and activities in those Countries.



CGIAR Business Plan: Greater access to research and data for scientists and decision makers



GARDIAN HOME **SEARCH** ANALYTICS

DATA SEARCH

maize All Open Restricted And Or

Resources Map What If

Search results: 13304

FILTERS

YEAR: All
 CGIAR CENTER: All
 LOOK IN: All fields

PUBLICATIONS (12890) **DATASETS (414)** **GENETIC ACCESSIONS**

TYPE: All COUNTRY: All GEOGRAPHICAL SPREAD

1998 Scientific Publication
A gene for resistance to the maize streak virus in the African CIMMYT maize inbred line CML202
 CIMMYT

2012 Scientific Publication
Reduced tillage, mulching and rotational effects on maize (*Zea mays* L.), cowpea (*Vigna unguiculata* (Walp) L.) and sorghum (*Sorghum bicolor* L. (Moench)) yields under semi-arid conditions
 ICRISAT

1982 Scientific Publication
Maize Chlorotic Stunt in Africa: a manifestation of maize mottle Virus?
 IITA

GARDIAN HOME **SEARCH** ANALYTICS

DATA SEARCH

Search for All Open Restricted And Or

Map What If

GEOSPATIAL DATA

All Locations

Your selection:

- Bean Total Yield (kg/ha)
- Bean Total Production (mt)
- Soybean Irrigated Harvested Area (ha)

Legend

Bean Total Yield (kg/ha)

327 602 901 1,195 1,554 2,113 8,845

CGIAR Business Plan: Performance, management, accountability

2016 2017 2018

Outcome / Impact on the Ground

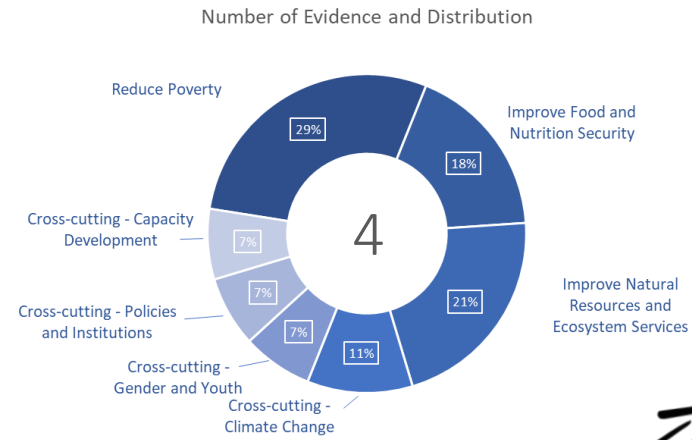
Progress towards:
System Level Outcomes (SLOs)

SLO SDG

Outcome Case Studies



RTB - 2017
Western Africa
 Adoption of citizen science methodology shapes new linkages between researchers and farmers for climate adaptation.
SLO Target: 2.1. Improve the rate of yield increase for major food staples from current <1% to 1.2-1.5% per year
IDO/Sub-IDO: 1.3.2 Increased livelihood opportunities, A.1.4 Enhanced capacity to deal with climatic risks and extremes
Cross-cutting: Gender, Youth



This page displays outcome case studies related to a specific region.
 Clicking on the pin displays information on the case study.

All case studies for the selected region are listed in this table.

Case Study Title	CRP/PTF
Adoption of citizen science methodology shapes new linkages between researchers and farmers for climate adaptation.	CCAFS
De Brauw, 2016 showed that biofortified OFSP varieties have disseminated to an estimated 2.89M households in 12 SSA countries. (125 grams per day meets the daily vitamin A requirement of a child under five).	RTB
CIMMYT, FAO and the World Bank found in Kazakhstan that spring wheat yields are as much as 58% higher under (widely-adopted) zero tillage introduced by WHEAT than with conventional technologies.	WHEAT

Reporting Indicators

Innovation by Stage

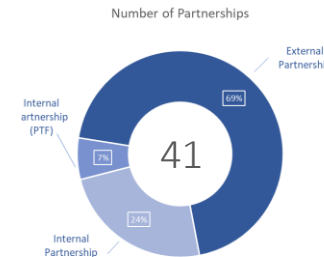
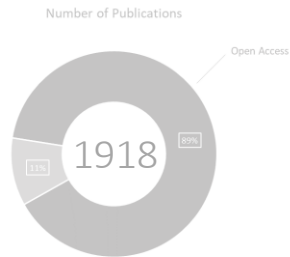
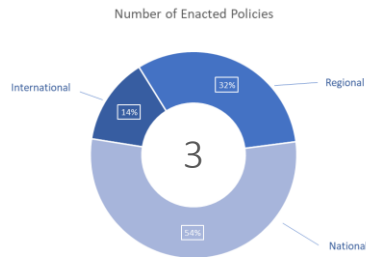
Policies

Peer-reviewed Papers

Partnerships

Trainees

23



Find information by



SDG



Program / Platform



Partner Institutions

Thank you
Hartelijk bedankt



Government of the Netherlands