

Iraq

Country Plan of Implementation

Orange Knowledge Programme

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List of abbreviations

b2b	business to business
CPI	Country Plan of Implementation
CSA	Climate Smart Agriculture
EKN	Embassy of the Kingdom of the Netherlands
FNS	Food and Nutrition Security
g2g	Government to government
Gol	Government of Iraq
HE	Higher Education
IDP	Internally Displaced People
k2k	knowledge institution to knowledge institution
KRG	Kurdistan Regional Government
KRI	Kurdistan Region of Iraq
MA	Ministry of Agriculture
MASP	Multi Annual Country Strategy
MENA	Middle East and North Africa
MOE	Ministry of Education
MOFA	Ministry of Foreign Affairs
MOHESR	Ministry of Higher Education and Scientific Research
MOWR	Ministry of Water Resources
MSP	MENA Scholarship Programme
NFP	Netherlands Fellowship Programmes
NGO	Non-Governmental Organisation
NICHE	Netherlands Initiative for Capacity development in Higher Education
OKP	Orange Knowledge Programme
RRP	Recovery and Resilience Programme
ToC	Theory of Change
TVET	Technical and Vocational Education and Training

I. Introduction

This document describes the purpose and intentions of the implementation of the Orange Knowledge Programme in Iraq and the Kurdistan Region in Iraq (KRI). It follows after an identification process in which capacity needs in the country have been analysed and discussions with stakeholders have taken place.

After a brief presentation of the Orange Knowledge Programme (OKP) in section two, this report outlines in section three the present state of affairs, hereby focusing on the local - and regional context of Iraq. In section four the needs are identified. As agri-food is the Dutch priority sector for Iraq, this section also analyses Iraq's agricultural sector. In addition, a brief overview is provided on Iraq's education system and challenges in the education system. It sketches Iraq's policies and interventions with regards to Iraq's agri-food sector and the education system. Section five elaborates on the envisaged Theory of Change and outcomes of the programme. Section six explains the articulation and calls. Section seven provides an indicative budget for the programme, while section eight describes the proposed harmonisation and coordination with (inter)national projects and programmes. Finally, section nine refers to monitoring and programme progress.

II. Brief presentation of the Orange Knowledge Programme

The Orange Knowledge Programme is the successor to the Netherlands Fellowship Programmes (NFP) and the Netherlands Initiative for Capacity Development in Higher Education (NICHE). The Orange Knowledge Programme merges the two preceding programmes into a single integrated approach, with the addition of new elements, including increased involvement of alumni, attention for cooperation between knowledge organisations, and communication focusing on the presentation of results.

The main objective of the programme is to contribute to sustainable and inclusive development through the strengthening of organisations key to sectoral development in partner countries. This will be achieved by developing the capacity, knowledge and quality of individuals as well as organisations both in the field of Technical and Vocational Education and Training and Higher Education (TVET/HE) and in other fields related to the priority themes in the Orange Knowledge partner countries.

The Orange Knowledge Programme will last for 5 years and will be implemented through three types of interventions:

- individual scholarships,
- group trainings and;
- institutional projects focusing on sustainable improvement of technical and higher education capacity.

The Dutch organisation for internationalisation in education (Nuffic), administers this programme on behalf of the Ministry of Foreign Affairs of the Netherlands. Nuffic is responsible for its implementation and follow-up in accordance with each Country Plan of Implementation (CPI).

For further information on the OKP reference is made to annex 1.

III. Current state of affairs

Local context

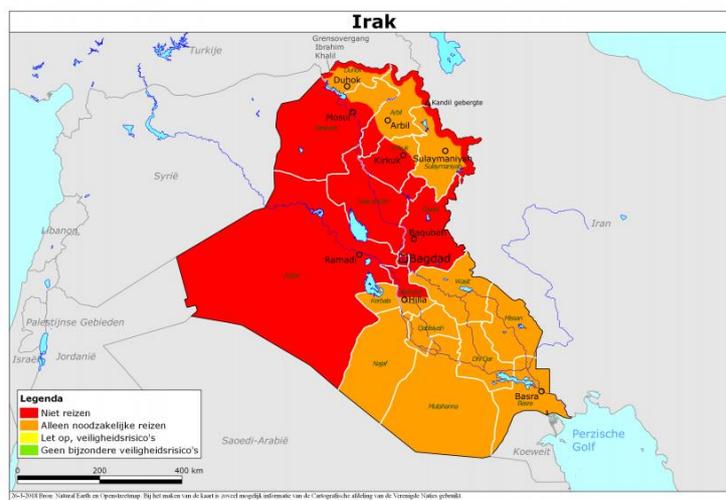
Recent history

Iraq is slowly recovering from a period of conflict and instability. Since the ousting of Saddam Hussein by Western troops in 2003, the subsequent phase of sectarian violence and the occupation by ISIS of parts of the country have severely damaged civil and political institutions. Since the military defeat of ISIS in November 2017, a transition set in towards stabilization. People are returning to normal or trying to rebuild their lives. Elections were held in 2018 and political elites work on gaining trust of citizens.

With security much better than in the previous years, Iraq is reconnecting with the world. Oil production has nearly doubled over the past decade to an average of about 4.5 million barrels per day in January 2019¹. Iraq has a steady income and is an Upper Middle Income Country.

Stability

There are still some serious challenges to national stability. While overall security in Iraq is steadily improving, the travel advise of the Dutch MOFA is negative for large parts of the country, and long-term stability is not guaranteed. The current travel advise shows that the Kurdistan Region and South Iraq have a more favourable security situation compared to Central Iraq.



¹ US Energy Information Administration

Iraq is a focus country in Dutch foreign policy. Activities resulting of this policy, including in the knowledge sector, should be available in all parts of Iraq. While striving to reach the KRI, the Central and the Southern parts of the country through the OKP, Nuffic may apply different types of interventions based on the local security situation. Iraqi's have become used to travelling to safe parts of the country to be able to attend international trainings.

In addition to the security issues, Iraq's political elites have not always overcome their sectarian and internal battles for political and sectarian interests. And just like in neighbouring countries, systems of checks and balances are weak or non-existent. Trust in political institutions is low, Iraq ranks 168 (out of 180) countries in the Corruption Perception Index 2018². The 2018 popular uprisings in the region of Basra are an indication that citizens blame authorities for bad living circumstances. It is expected that uprisings will flare up again in summer, when temperatures rise and the lack of electricity and clean water in the governorate will be more insufferable.

There are still large numbers (3 million) of Internally Displaced People (IDPs) and (mostly Syrian) refugees living inside and outside camps, who need help or are waiting for sufficient security and economic perspectives to return home.

In general, with a lack of economic prospects, crime or military extremism can be an alternative for young Iraqi's.

Economy

The Iraqi economy is based on oil revenues (85%) while the other sectors combined constitute only 15% of all revenues. The oil sector only employs approximately 2% of the Iraqi labour force, while the Government employs close to 65% of the labour force. This is due to a system where every university graduate was promised a job in the public sector. In this context the public sector never really developed. Moreover, the Iraqi government is competing with SMEs through its purchasing power and employment of talented and skilled workers³. Besides the fact that it is not healthy in economic terms to have the government as the main employer, Iraq's population is young (60% is younger than 25), and there is no way the government can absorb such numbers in its labour force.

Unemployment is estimated at 15%. Among youth this number is 40%⁴. Many Iraqi women who participate in the labour force choose to seek public sector employment. Nationally, 60% of all female workers are employed by the government; while in KRI, this number is reportedly closer to 80%⁵. Female unemployment, especially in Kurdistan, is reportedly lower in rural areas due to high female employment in agriculture.

Priorities for national and international stakeholders

In the past years, especially during and immediately after ISIS' occupation of cities in the region, international attention and aid was centred around humanitarian and security issues. Security is much better now, especially in the Kurdistan Region of Iraq (KRI), but also in

² Transparency International.

³ Private Sector Development Scoping Study, Iraq, Report Written for the Netherlands Ministry of Foreign Affairs and the Netherlands Enterprise Agency, 2018.

⁴ ILO 2012

⁵ Private Sector Development Scoping Study, Iraq, Report Written for the Netherlands Ministry of Foreign Affairs and the Netherlands Enterprise Agency, 2018.

southern regions. As a consequence the focus of international aid programmes is increasingly turning towards supporting economic development of the country.

The MENA region as a whole, and the countries neighbouring Syria in particular (among them Iraq), became focus countries for the Dutch government in October 2017. The Netherlands seeks to address the root causes of conflict and irregular migration from Iraq. With the improving security and the military defeat of ISIS, Dutch aid efforts, in line with other international initiatives, are focusing on supporting economic development and employment perspectives.

National and international stakeholders agree that Iraq and the KRI need to diversify its economy and decrease its oil dependency. The Netherlands intends to play a role in diversifying efforts by supporting private sector development in key sectors where it can make a difference, such as agriculture (and efficient water-management) and food manufacturing. It aims to stimulate employment and entrepreneurship opportunities for youth to enhance economic prospects⁶. Because without viable job opportunities, Iraq's youth might opt for alternatives like criminal activities or migration.

The efforts of the Dutch government aim to contribute to Iraq's development at three levels: government to government initiatives (g2g) and business to business initiatives (b2b), and of knowledge to knowledge (k2k).

Previous Nuffic activities in Iraq

Nuffic has an Ankara office that supports capacity building projects implemented in Jordan, Lebanon, Iraq, and Turkey through the HOPES project. The HOPES project is EU-funded and seeks to provide better access to higher education for refugees of post-secondary-age from Syria as well as young people in the host communities affected by the high influx of refugees in Egypt, Iraq, Jordan, Lebanon and Turkey. From Iraq, around 1200 people in KRI have directly benefited from the programme. The project does not involve partnerships with Dutch knowledge institutions.

Nuffic is the implementing agency for the Dutch MENA Scholarship Programme (MSP) which offers scholarships for short courses in the Netherlands to build capacity for professionals within organisations. The main aim of the MSP scholarships is to contribute to democratic transition in the selected countries. For more information on MSP, please visit [MSP](#). Iraq has been participating in MSP from 2008/2009 onwards. Since then, more than 214 Iraqi professionals have been trained in the Netherlands. Main fields of study in the MSP context are related to water, management and agriculture.

Nuffic has a history of cooperating with sister-organisations such as DAAD and British Council, who have offices in the MENA region since a long time.

⁶ Multi-Annual Country Strategy Iraq 2018-2022

IV. Identification of the needs

Selected priority theme

Food and Nutrition Security (FNS) and efficient water management for climate smart agriculture (CSA).

Analysis of the priority theme

As described in its Multi-Annual Country Strategy Iraq 2018-2022, the Netherlands wants to increase its cooperation with Iraq in the interrelated themes of Security, Migration, Work and Income, and Human Rights. As a resource rich middle-income country, Iraq does not need large amounts of financial aid, but it can benefit from knowledge exchange and capacity building programmes. The Netherlands can offer this type of assistance in areas where it has particular expertise, to strengthen the education sector, the private sector, the entrepreneurship ecosystem, agriculture and water management.⁷

General background

Historically Iraq used to have an agricultural economy. From being a smallholder food producing country covering its needs, Iraq has become a major importer of food. Though the agricultural sector still provides employment and income to a large proportion of the population, the sector's capacity to feed the population and its role in the economy has been heavily affected by several decades of sanctions, violent conflict, imports of cheap foodstuffs and water scarcity. As a result, value chains have been disrupted, connections between producers and markets distorted, the enabling infrastructure of extension and mechanisms for ensuring product quality and food safety collapsed, and the curriculum of the educational system are outdated⁸.

Employment in agriculture is about 20% of total employment in Iraq (it is the second largest employment sector after the government)⁹. For women, employment in agriculture amounted to about 44% of the total women's employment, while for men this was 16% of total men's employment in 2017.

In a context where both Iraqi and international stakeholders agree that the economy needs to be diversified and the private sector needs to be strengthened, development of the agricultural sector offers an opportunity to grow after years of neglect. In line with that thought, the three pillars for the Government of Iraq's strategic plan for agriculture (in collaboration with FAO) are to improve the capacity of public institutions, enable market-based agriculture with policy reforms, and invest in local markets, irrigation, farm inputs, extension and animal health services¹⁰.

It is one of the objectives of the Netherlands to contribute to these strategic plan and to support increased employment in the agri-/food sector through several g2g, b2b and k2k

⁷ Multi-Annual Country Strategy Iraq 2018-2022

⁸ Joost Jongerden, Wouter Wolters and Youri Dijkxhoorn, (2018): Explorative Study Agricultural Development in Iraq and the federal Kurdistan Autonomous Region

⁹ Multi-Annual Country Strategy Iraq 2018-2022 quoting UNDP

¹⁰ UNESCO-EU LMS Report Agriculture

instruments. Advancing competitiveness in production, processing and marketing of agri-food will improve employment prospects for women and youth in Iraq. Supporting efficient water-management will contribute to climate smart agriculture.

Impact of the g2g, b2b and k2k projects and instruments will increase when they are linked whenever possible, for example by connecting educational institutes to the private sector in terms of creating practical exposure opportunities for students and teachers. Such connecting of knowledge, practice and policy is considered vital to the success and innovative power of the agriculture and food sector in the Netherlands¹¹.

A successful development of the agri-food sector depends on many factors, and the Netherlands can offer knowledge when it comes to some of them. Dutch knowledge can help modernise the agri-sector and connecting production to the market, as well as help improve water-management capacities.

Agriculture-food

The Iraqi government aims to increase competitiveness of agricultural production, boost rural employment and achieve sustainable food security¹². With the public sector in Iraq downsizing, there will be fewer public sector jobs in agriculture, so technical and professional level training needs to be less theoretical and more geared to farming enterprises than to jobs in the Ministry of Agriculture.

It is a challenge to modernize the agricultural sector, to promote better connection of production to the market, while applying smart and innovative technology. In order to compete in the market with cheap foreign imported products.

The Netherlands has knowledge and expertise in the field of sustainable agriculture, agribusiness and food innovations. In response to the Iraqi government indicated challenges such as climate change, desertification, salinization and poor water management¹³, Dutch knowledge and expertise can support in relevant fields¹⁴ like:

- strengthening the horticulture (training to improve cultivation and product quality, training to improve ability of farmers to create stronger connections with markets, improving competitiveness);
- entrepreneurship and Private Sector development (entrepreneurial skills development that benefit (Agricultural) entrepreneurs including empowerment of female entrepreneurs);
- development of the dairy production sector (support to the small cottage industry, improving the delivery system, pasteurisation and bottling);
- food quality control (building food research and testing capacity, training on food quality management and regulation).

¹¹ Multi-Annual Country Strategy Iraq 2018-2022

¹² National Development Plan 2018-2022

¹³ Multi-Annual Country Strategy Iraq 2018-2022

¹⁴ Selection of fields is based on meetings with local Iraqi stakeholders; Recommendations Joost Jongerden, Wouter Wolters and Youri Dijkhoorn, (2018): Explorative Study Agricultural Development in Iraq and the federal Kurdistan Autonomous Region; Recommendations Private Sector Development Scoping Study, Iraq, Report Written for the Netherlands Ministry of Foreign Affairs and the Netherlands Enterprise Agency, 2018.

Water management

Without water for irrigation, any intervention in the agricultural sector will fail. Population growth, economic development, the building of dams in Turkey and Iran and reduced precipitation due to climate change resulted in a severe water crisis in the country. On the demand side, Iraq needs to take drastic measures to reduce the use of water, especially in the agricultural sector, which is responsible for 75% of the water use in Iraq¹⁵.

To overcome current and future water shortage, Iraq has a range of options at its disposal to respond and adapt. These options can generally be summarised into the following broad categories¹⁶:

- Increasing water productivity. This can include an improvement of the water transfer coefficient and soil-less culture in greenhouses, where water can be saved by using new techniques;
- Preventing losses in the domestic, industrial and agricultural use of water;
- Increasing reuse of water from domestic, industry and agricultural use;
- Improvement of water quality;
- Reduce the salinity levels in the Tigris and Euphrates rivers, especially in their lower reaches.

For many of these options, capacity in institutions and among farmers needs to be further developed (and general awareness of the water shortage issues is also required).

The Iraqi government has already engaged IHE Delft for Water Education for a review of its water strategy. The review process is finalised in Q1 2019. With the support of the Dutch MOFA, IHE will also subsequently provide capacity building trainings for MOWR staff. The Ministry of Water Resources works closely together with the Iraqi universities to develop solutions for national and local water management issues. Dutch expertise in this particular field can help strengthen capacities and technical know-how within the Iraqi knowledge institutions, and through them within the country.

Private sector development

Working in the private sector is generally considered unattractive by Iraqis, since it is believed that the work in the private sector offers lower pay, less job security and little or no social security. The private sector is very small as well as underdeveloped (mostly informal), and therefore offers less opportunities than the public sector. The existing formal private sector is not ready to absorb the excess of the public sector as well as an estimated million new entrants to the labour market every year.¹⁷

Clearly a shift is necessary in society's mind-set, away from the public sector as primary employer. This requires special efforts at all levels of society, and in all sectors of the economy, including the agri-food and water-management sectors. Therefore private sector development will be a crosscutting theme throughout the priority theme Food and Nutrition Security (FNS) and efficient water management for climate smart agriculture (CSA).

¹⁵ Multi-Annual Country Strategy Iraq 2018-2022

¹⁶ Selection of fields is based on meetings with local Iraqi stakeholders; and as described in Joost Jongerden, Wouter Wolters and Youri Dijkhoorn, (2018): Explorative Study Agricultural Development in Iraq and the federal Kurdistan Autonomous Region

¹⁷ UNESCO-EU LMS Report Agriculture

The education system and training gap in the priority theme

General background

Iraq has a strong history in education, one generation ago it was one of the most developed [educational systems](#)¹⁸ in the Arab world. But the sector has been damaged by the economic sanctions, wars and political conflicts. Due to the conflicts, institutions of higher education have become somewhat isolated internationally. They are often recycling outdated curricula. Reconnecting to the outside world may contribute to a badly needed renewal of the educational system.

Pupils of intermediate secondary school age whose results are not high enough for admission to the preparatory phase can continue to 3-year secondary vocational programmes in technology (صناعة ṣinā'a), commerce (تجارة tijāra) or agriculture (زراعة) at a Preparatory Technical School (إعدادية مهنية i' dâdiyya mihaniyya). After passing a central examination set by the Ministry of Education, graduates of these programmes are awarded the Secondary School Certificate/Vocational Baccalaureate. The main purpose of these programmes is to prepare pupils for entry into the labour market, and the curriculum is made up of 40-45% theory and 55-60% practical subjects.

There are around 300 TVET (Vocational Secondary (Technical)) institutions in Iraq which provide programmes in specialisations such as nursing, obstetrics, social work, the fine arts and for jobs in the police and air forces. The level of the Vocational Secondary Certificates is the same as that of the Secondary School Certificate (technical/vocational direction) and therefore also may allow admission to higher education. Vocational work has low status and is not popular in spite of a great need for vocational workers such as mechanics or nurses.

Admission to higher education in Iraq is granted to students with a Secondary School Certificate or the Certificate from one of the Vocational Secondary (Technical) Institutes. Iraq has two kinds of higher education institutions: technical institutes and universities.

There are around 25 public universities in Iraq, and 22 private higher education institutions. In Iraqi Kurdistan, there are 15 public universities and 11 private higher education institutions. The number of private universities is increasing as there appears to be great interest in higher education and it is profitable business. However, the standards for admission and therefore of overall academic level may be lower for the private universities than for public universities.

Iraq boasts a total of over 20 Technical Institutes, all called 'Technical Institute', followed by the name of the place where the institute is located. These institutes fall under the Foundation of Technical Institutes, an umbrella organisation that is governed by the Ministry of Higher Education and Scientific Research.

These non-university technical institutes (معهد فني ma'had fannî) provide 2-year programmes in higher professional education, of which upon completion the Technical Diploma (دبلوم فني / دبلوم فاني diblûm fannî) is awarded.

During the years of local ISIS rule, universities managed to keep most classes open by creatively drawing on available resources. Now, even as many universities in recently

¹⁸ More detail regards education system Iraq on [Nuffic website](#)

liberated areas have resumed classes on their home campus, large numbers of students and faculty members remain scattered across Iraq as refugees. Higher Education is one of the sectors that sustained serious destruction of infrastructure in 2003.

Some remnants of pre-2003 policies are still visible and influential today: choice of studies depends on the high school grades, not on field of interest. Also, every university graduate was promised a government job, with all its accompanying benefits. As a consequence, there is no culture of teaching entrepreneurship or preparing students for work in the private sector.

The higher education system is highly centralized. The KRI has its own Ministry of Higher Education. The government has resources and programmes through its various Ministries to support Master Courses and PhD scholarships for their staff, both in Iraqi and in foreign universities. Government officials indicated their interest in sending staff to Universities in the Netherlands for studies and research in the fields of agriculture and water-management, paid by the Government of Iraq (GoI).

The GoI with support of UNICEF and UNESCO will develop a new education strategy for 2020-2030, covering all educational levels.

In the meantime, since 2016 and funded by the EU, UNESCO has worked on a TVET reform programme. TVET falls under three ministries: MOHESR, MOE and the Ministry of Labour and Social Affairs. The reform programme will by the time it is finalized (mid-2019) have produced a national qualification framework, supportive legislation, an accreditation manual, a national body for supervising the TVET system, and new curricula for different levels of TVET in the areas of agriculture, construction and hospitality. Subsequent implementation of the TVET system reforms requires the commitment and efforts from all the ministries involved.

Agriculture-food

Agriculture is not yet a popular sector of employment for the young urbanizing population, and therefore not a preferred topic of education. Many universities in Iraq and Kurdistan have recently changed the name of their Agriculture faculty to attract more students, and to connect it to 'management' or 'engineering'.

There is a lot of academic know-how present in the university faculties for Agriculture and Food Science, with teachers and professors who have degrees from international universities. Apparently funds are available for students and staff to pursue post-graduate studies. But faculties often lack resources, modern equipment (laboratories, machinery, etc.) for educational purposes, and technology for innovative research. Also they appear to have little or no institutional connections and collaboration with colleagues in the rest of the world.

Another crucial gap in all levels of agri-food education, is a link to the private sector and modern agri-food businesses that could provide practical experience for (graduate) students. Graduates have no practical training and are not skilled enough for employment in the private sector. The curriculum needs to be updated and the training needs to be far more practical, for instance by setting up training farms.

Unemployed graduates or low-skilled farmers would benefit from international exchange programmes or twinning arrangements with international institutions, to enable skill transfers and local diffusion of international best practices and technologies¹⁹.

MOHESR and the universities recognize that the Netherlands can offer valuable knowledge in the field of agriculture. The Iraqi HE institutions indicated that they would benefit from skills training and knowledge transfer in specific fields like horticulture, livestock, dairy, and fisheries.

Water-management

There are a few universities that have a college for Water Systems, in other universities water-management is part of their agriculture or engineering faculties. Academics in this field work closely together with the MOWR, among the latest topics of national interest are desertification and salinization. University faculties have contracts or MoUs with the MOWR and many of the postgraduate students at Iraqi universities are MOWR staff.

Most faculties for water-engineering lack modern equipment and technology for educational purposes and for research.

MOHESR, MOWR and the universities recognize that the Netherlands can offer valuable knowledge in the field of water-management. They can also help improve faculty staff capacities, for example in teaching, leadership or curriculum development.

Private sector development

The shift that is necessary in society's mind-set, away from the public sector as primary employer, requires special efforts in all sectors of society including in the education sector.

The educational system and curricula currently do not equip students with the skills required in the private sector or in the modern labour market. They are trying though, many universities throughout the country have opened career development centres where students learn soft skills related to employability in the private sector (CV writing, interview behaviour, etc). Local initiatives also exist to arrange internships for graduates in private sector companies, but so far these do not include agricultural businesses.

Therefore private sector development will be a crosscutting theme throughout the priority theme in the Dutch government k2k projects. Skills related to entrepreneurship, business development or management should be part of the projects, and the option of including private sector internships would be encouraged. Such combinations are in line with the OKPs efforts to synchronize as much as possible with other Dutch instruments and projects.

V. Envisaged Theory of Change and outcomes

Based on the analysis of needs and the consultations with the stakeholders, a theory of change (ToC) for Iraq and KRI for Food and Nutrition Security (FNS) and Water has been formulated. This ToC is based on the general [OKP ToC](#) and describes the way the OKP programme will contribute to the Dutch development cooperation policy as described [here](#).

¹⁹ See also UNESCO-EU LMS Report Agriculture

The OKP M&E framework is intended to make clear that all interventions within OKP should be geared to contribute coherently and measurably to common long term impacts, as defined by the Ministry of Foreign Affairs (<https://www.dutchdevelopmentresults.nl/theme/>).

The OKP programme in Iraq aims at the following **objectives**:

- contribute to End hunger, double smallholder productivity and income, and ensure the sustainability and resilience of food production systems by 2030 (SDG 2) and
- contribute to ensuring availability and sustainable management of water and sanitation for all (SDG 6) and to increased employment opportunities for Iraqi youth (SDG 8).

The following **long-term impact** will be aimed at:

1. Promote agricultural growth;
2. Create ecologically sustainable food systems;
3. Water efficiency in agriculture is increased.

The following **medium-term impact at country level** will contribute to this:

- (I) Education system (TVET/HE) is of good quality, relevant and accessible (SDG 4);
- (II) Partnerships between persons and organisations are inclusive and sustainable (SDG 17);
- (III) Organisations key to (sectoral) inclusive development of partner countries are strengthened by inflow of enhanced workforce.

This will be achieved by the following **outcomes at project level**:

- A. TVET/HE organisations (in the selected partner countries and in NL) perform better their core tasks, firmly embedded in their environment (in line with country / regional specific labour market needs & aiming at inclusiveness);
- B. Enhanced knowledge and skills of individuals and organisations in line with country / regional specific labour market needs & aiming at inclusiveness (in partner countries and in the NL).

Annex 2 describes the Theory of Change for Iraq.

Annex 3 provides an M&E framework presenting the expected outcomes and connected indicators for the OKP country programme.

VI. Articulation and calls

The Orange Knowledge Programme offers different kinds of capacity building interventions (see Annex 1):

1. Institutional Collaboration projects between TVET and higher education institutions locally and in the Netherlands;
2. Tailor-Made Training (TMT) for groups;
3. Individual scholarships for mid-career professionals;
4. Alumni events.

In the case of Iraq, Iraqi knowledge institutions will benefit the most from Institutional Collaboration projects and from Tailor-Made Training for groups. For individual scholarships, mid-career professionals can already make use of the MSP. Also, as an upper middle income country, the GoI has resources for providing international scholarships for its staff. The MOHEAS and MOWR have postgraduate scholarship programmes for Ministry staff. Nuffic will therefore focus, through the OKP, on supporting institutional capacity development. It strives to support projects that include staff, students and/or officials from the different regions of Iraq, preferably also from marginalized regions. Furthermore, applicants to the OKP programme will have to pay attention to marginalised groups and promote participation of women.

Nuffic will publish calls for institutional cooperation projects and group training. Based on those calls, key organisations in Iraq and in the Netherlands are invited to submit proposals that are aligned with the CPI and contribute to the ToC outcomes and impact (further details in annex 2 and 3). Proposals can, if deemed necessary, include options for capacity building activities and training sessions in Erbil or any other suitable venue pending the opportune travel advice.

The long-term aim is to support Iraq's Food and Nutrition Security (FNS) through efficient water management for climate smart agriculture. In doing this, the Orange Knowledge Programme intends to strengthen education and knowledge at TVET- and higher education level (i.e. technical institutes and universities) with the aim to improve skills, competences and knowledge of people working in agriculture, water for agriculture and water management. All together this should lead to improved management of water in the agri-food sector and better connections to the labour market, including private sector development and innovation.

In the framework of the Orange Knowledge Programme, this can be realized in various possible ways, e.g.

- Improve the curricula of agricultural education at TVET institutions, technical institutes and universities. In doing this, special attention needs to be addressed to "agri-business" (to assure that graduates are employable) and sustainable agriculture (to assure that agriculture is conducted in a sustainable manner). Curricula should include internships and practical skills training that the private sector demands for;
- Design programmes that build professionals' (students') employability- and entrepreneurial skills (entrepreneurship, business skills, communication, soft skills) and offer practical learning (work-based learning);
- Design FNS programmes that are market oriented, successful in attracting male and female students and deliver graduates with knowledge, attitude and skills that meet the labour market needs;
- Enhance knowledge and research for developing sustainable water treatment plants for re-use of waste water for agriculture;
- Strengthen capacity (skills and knowledge) and management skills of teaching and managerial staff;
- Strengthen institutional structures and systems at education providers that offer programmes on agri-food or water-management;

The priority organisations are:

- 1) Non-Governmental Organisations that play a key role in the agricultural value chain and sustainable water sector;
- 2) Government organisations at national, regional and city/local level that play a central role in the agricultural value chain and sustainable water sector;
- 3) University and technical vocational training and education knowledge organisations providing education, applied research and advisory services in the agricultural value chain and sustainable water sector;
- 4) Private sector in in the agricultural value chain and sustainable water sector.

Preliminary timeline of implementation:

Step	Date
CPI published on Nuffic website	June 26, 2019
First call published	June 27, 2019
Deadline call	September 17, 2019
Selection partners	October 2019
Start of project in case of Institutional Collaboration	October, 2019

VII. Indicative budget for the programme

As a general indication, the agreed budget over the term of the programme is as follows:

Period of implementation 2019 – 2022:	FNS and efficient water management for CSA	Total
Institutional projects	1,100,000	1,100,000
Group training (TMT+)	1,200,000	1,200,000
Individual scholarships*		
Alumni events	PM	PM
Total		2,300,000

* Individual scholarships for mid-career professionals Mater Courses and Short Courses can be obtained via the MSP. In addition, the Gol has resources for providing international scholarships for its staff.

Note: As a focus country in the current Ministry of Foreign affairs' policy, Iraq became a full-fledged OKP country which includes the instrument of Institutional Collaboration projects. In addition to the Institutional Cooperation and keeping in mind the already existing opportunities for individual scholarships, the OKP aims to make affective use of the available funds for Iraq through the instrument of tailor made group trainings.

Note: The funds allocated to the programme as a whole and to each partner country's programme may be subject to change, and this may affect the above indicative budget. The budget may also change in line with political decisions taken by the authorities. In

consequence, Nuffic reserves the right to adjust this indicative budget and undertakes that, in this event, it will notify the relevant parties immediately.

OKP promotes co-funding and matching of funds. Iraq is classified by the OECD as a UMIC Country. Parties applying for Tailor Made Trainings and Institutional Collaboration projects are required to include co-funding in their proposals. This will contribute to reciprocity and ownership of results established within the collaboration between all partners. Integration of co-funding in the breakdown of budgets will be one of the assessment criteria in the selection of proposals. For Iraq, Nuffic will introduce a minimum level of co-funding as mandatory for applications as follows:

% of Co-financing	In 2019	In 2020	In 2021
LDC	0%	0%	0%
OLIC	0%	5%	5%
LMIC	10%	15%	15%
UMIC	20%	25%	25%

In forthcoming calls, more information will be given on the specific demands for co-funding.

VIII. Coordination with other programmes

Nuffic aims to add value to efforts by the GoI with UNESCO and UNICEF, regarding TVET reforms and the new strategy for education that is under preparation.

The proposed programme supports the objectives as formulated in the National Development Plan (NDP) for 2018-2022 of the Iraqi Ministry of Planning²⁰ (which regarding agriculture and water resources includes the aims of increasing the agricultural sector share in GDP; achieving food security; securing the demand for water and achieving water balance; working on providing sustainable water resources).

The GoI and the UN have a two-year Recovery and Resilience Programme (RRP, launched in February 2018) in the post-conflict regions. The RRP is envisioned as a nexus framework, which builds on the work which has been done by other partners in Iraq. One of the three components especially targeted is 'Restoring Agriculture & Water Systems'. All activities undertaken by the Netherlands take place in the context of this broad range of activities by the international community. Hence, OKP will focus on areas where the Netherlands are particularly advanced, such as water management and agriculture.

In Baghdad, a donor coordination group was recently established on agriculture and water. The EKN plays an active role in this group and will be able to establish links to the OKP projects when relevant. The same is true for linking to Orange Corners activities. The Orange Corners project provides young entrepreneurs across Africa and the Middle East with training, networks and facilities to start and grow their start-ups. Via the EKN in Baghdad and the

²⁰ http://www.iraq-iccme.jp/pdf/archives/nationaldevelopmentplan2018_2022.pdf

Netherlands Consulate General in Erbil, OKP and Orange Corners can build relevant coalitions.

OKP will coordinate its efforts with sister organisations like DAAD and the British Council.

IX. Monitoring programme progress

The organisations taking part in the OKP programme are asked to report on the progress of their projects and scholarships using a Results Oriented Monitoring tool that will be provided by Nuffic. They will also record their successes and setbacks so that lessons can be learned from them as part of an organisational learning approach.

Nuffic will monitor and evaluate the Orange Knowledge programme at programme level and will regularly discuss progress with the embassy and other stakeholders, especially regarding the progress achieved related to the outcomes indicated above and the successes and failures, together with suggestions for remedying setbacks and, if possible, redefining strategies and adjusting forecasts in line with the targeted outcomes.

If necessary, for example in the event of major changes, Nuffic will discuss proposed adjustments to the CPI with the embassy and other stakeholders which may lead to an adjusted CPI.

Annexes

- Annex 1. Brief presentation of the OKP programme
- Annex 2. Theory of Change for the OKP programme in Iraq for FNS and Water
- Annex 3. Matrix of OKP programme outcomes and impact indicators

Annex 1 Brief presentation of the OKP programme

The Orange Knowledge Programme (OKP) is the successor to the Netherlands Fellowship Programmes (NFP) and the Netherlands Initiative for Capacity Development in Higher Education (NICHE). The Orange Knowledge Programme merges the two preceding programmes into a single integrated approach, with the addition of new elements including increased involvement of alumni, attention to cooperation between knowledge organisations, and communication focusing on the presentation of results.

The main objective is to contribute to sustainable and inclusive development through the strengthening of organisations key to sectoral development in OKP partner countries. This will be achieved by developing the capacity, knowledge and quality of individuals as well as organisations both in the field of Technical and Vocational Education and Training and Higher Education (TVET/HE) and in other fields related to the priority themes in the OKP partner countries.

In order to reach this vision, the programme will focus on the following medium and long term outcomes:

- education system (TVET/HE) is of good quality, relevant and accessible (SDG 4);
- organisations key to (sectoral) inclusive development of partner countries are strengthened by inflow of enhanced workforce;
- partnerships between persons and organisations are sustainable (SDG 17).

Reference is being made to the [Theory of Change for the OKP programme](#).

The programme will be implemented through three types of interventions:

- individual scholarships,
- group trainings and
- institutional projects.

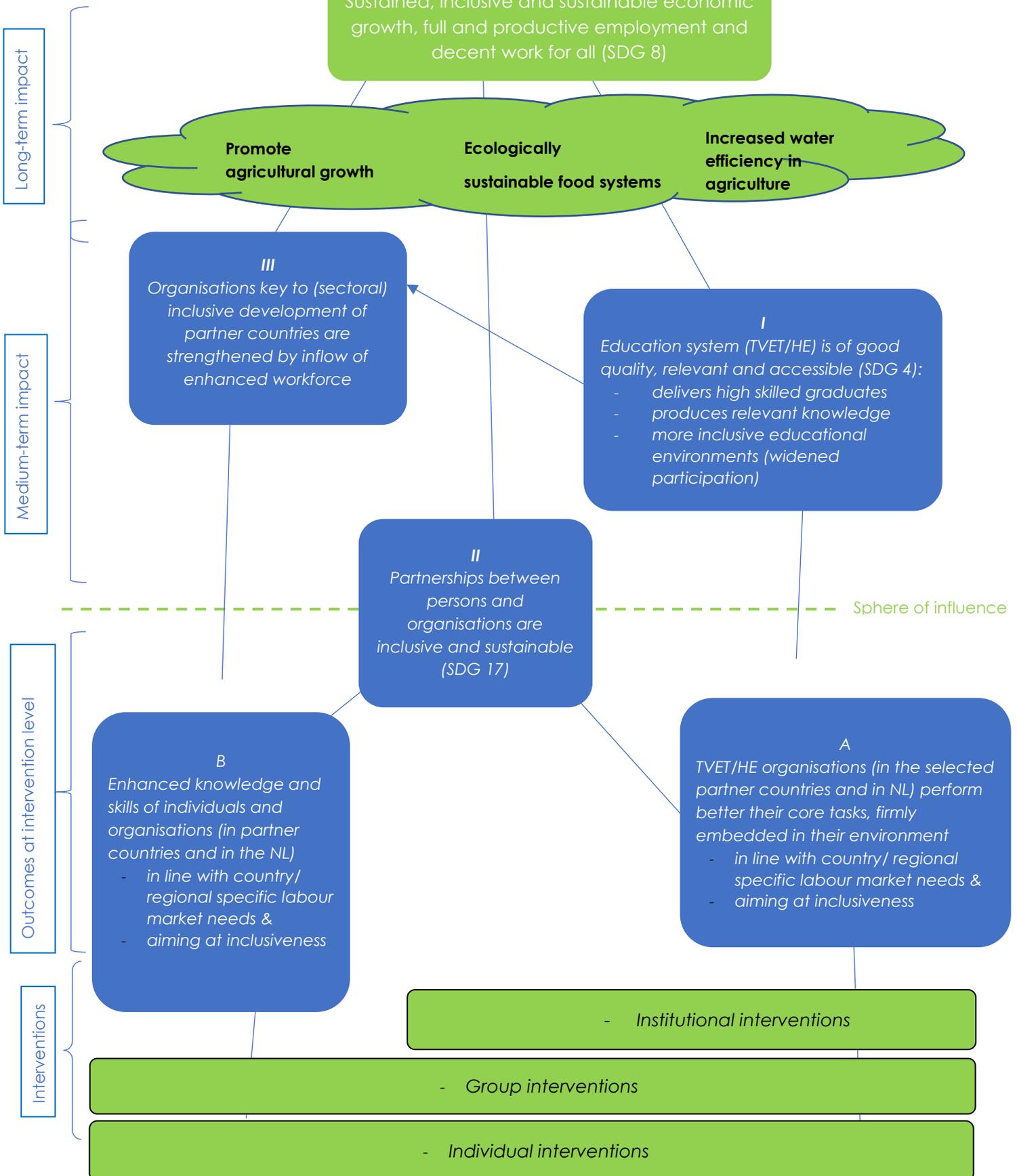
The following basic principles govern the programme:

- *Innovation:*
Is key to the development and implementation of the programme and is incorporated in all aspects of the programme.
- *Reciprocity and equality:*
More attention should be devoted to reciprocity and ownership should shift to the Technical and Vocational Education and Training and Higher Education (TVET/HE) organisations in partner countries. This means that the Southern partners play an active role in the design of collaboration projects, both as submitters and as reporters of progress. The new programme will also provide more opportunities for the joint financing of scholarships, training programmes or projects with the Southern region partners, reinforcing ownership and involvement.
- *Flexibility:*
This concerns flexibility in implementing the programmes as far as themes, countries, duration and financing methods are concerned, depending on the demand and the

context. Flexibility is also required in any modifications that need to be made in response to changes in the context within which the programme is implemented.

- *Demand-driven approach:*
Is key with regard to ownership, sustainability and the efficient use of resources. Important components include collaboration between Southern and Northern institutions, a comprehensive analysis based on available knowledge and reports, and the use of alumni.
- *Complementarity:*
The Knowledge Development Programme must be closely aligned with other centralised and decentralised programmes.
- *Co-funding:*
Where worthwhile and possible, the programme must stimulate co-funding.
- *Inclusion:*
The programme provides opportunities for marginalised and discriminated groups and integrates a gender perspective.
- *Focus on results:*
The programme focuses on presenting results stemming from knowledge development at individual, institutional and group levels.
- *Alumni:*
The programme creates a connection between knowledge professionals in the Southern region and the Netherlands. The new programme therefore places greater emphasis on alumni policy in all instruments.

Annex 2 - Theory of Change for the OKP in Iraq



Annex 3. Monitoring and evaluation framework

- This M&E framework is intended to make clear that all FNS interventions within OKP should be geared to contribute coherently and measurably to common long term impacts, as defined by the Dutch Ministry of foreign affairs (<https://www.dutchdevelopmentresults.nl/theme/>);
- It is important to be aware that this framework is subject to adjustments, in line with the Dutch development policy;
- When designing an FNS intervention, projects have to **contribute at least to one long term impact**;
- The **indicators in bold** are compulsory;
- Nuffic is currently developing an online instrument based on this matrix intended to facilitate the monitoring and evaluation of OKP projects;
- When calls for proposals will be published per country, the framework will be made more specific by focussing on specific long-term impact or choosing more compulsory indicators, depending on the country focus.

Objective: The OKP programme contributes to End hunger, achieve food security and improved nutrition and promote sustainable agriculture (SDG 2) through the strengthening of capacity, knowledge and quality of individuals as well as organisations in the fields of Technical and Vocational Education and Training and Higher Education (TVET/HE) in OKP partner countries.			
Long-term impact at programme level (link with FNS and Water and ToC)			
Long term impact	Long term impact indicator	Medium-term indicator	Outcome indicator (at project level)
1. Promote smart agricultural growth	Number of family farms (sub-sector, male/female, age: % < 35) that doubled their productivity and/or income	<ul style="list-style-type: none"> - number of family farms (sub-sector, male/female, age: % < 35) with increased productivity and/or income (indirectly**) - number of family farms (sub-sector, male/female, age: % < 35) with improved access to input and/or output markets (indirectly**) - number of family farms (sub-sector, male/female, age: % < 	<ul style="list-style-type: none"> - number of family farms (sub-sector, male/female, age: % < 35) with increased productivity and/or income (directly*) - number of family farms (sub-sector, male/female, age: % < 35) with improved access to input and/or output markets (directly*) - number of family farms (sub-sector, male/female, age: % < 35) whose farming enterprise became

		35) whose farming enterprise became more resilient to shocks (indirectly**)	more resilient to shocks (directly*)
2. Ecologically sustainable food systems	Number of hectares of farmland converted to sustainable use	<ul style="list-style-type: none"> - number of hectares of farmland used more eco-friendly (indirectly**) - number of hectares of farmland that became part of improved watershed/landscape management (indirectly**) - number of hectares of farmland that agri-ecologically became more resilient to shocks (indirectly**) 	<ul style="list-style-type: none"> - number of hectares of farmland used more eco-friendly (directly*) - number of hectares of farmland that became part of improved watershed/landscape management (directly*) - number of hectares of farmland that agri-ecologically became more resilient to shocks (directly*)
Objective: Contribute to ensuring availability and sustainable management of water and sanitation for all (SDG 6) through the strengthening of capacity, knowledge and quality of individuals as well as organisations in the fields of Technical and Vocational Education and Training and Higher Education (TVET/HE) in OKP partner countries.			
Long-term impact at programme level (link with Water ToC)			
3. Water efficiency in agriculture increased	Change of crop yield per unit of water used over time (SDG 6.4.1)	<ul style="list-style-type: none"> - number of institutions indirectly benefiting from innovative and efficient water allocation methodologies which increase crop yield - Number of associations, water users organisations and number of their professionals indirectly trained in 	<ul style="list-style-type: none"> - Number of associations, water users organisations and number of their professionals directly trained in applications in water-efficiency ranging from crop selection to irrigation scheduling etc.,. - Number of institutions that use the FAO AQUASTAT database to

		<p>applications in water-efficiency ranging from crop selection to irrigation scheduling etc.,</p> <ul style="list-style-type: none"> - Number of institutions that use the FAO AQUASTAT database to measure water productivity (indirectly). - Number of 'ready-to-use' applications for farmers and policy officers are developed and distributed (indirectly) - Number of farmers with a higher yield with the same amount of used water (indirectly) 	<p>measure water productivity (directly).</p> <ul style="list-style-type: none"> - Number of 'ready-to-use' applications for farmers and policy officers are developed and distributed (directly) - Number of farmers with a higher yield with the same amount of used water (directly)
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Medium-term impact	Indicator
<p>I. Education system (TVET/HE) is of good quality, relevant and accessible</p> <ul style="list-style-type: none"> - delivers high skilled graduates - produces 	<p>➤ <i>Education</i></p> <ul style="list-style-type: none"> - number of knowledge institutions that perform better - number of graduates (self) employed (male/female) - number of jobs supported/created - number of revised/newly developed curricula in NL and/or Southern partner organisation that integrate research results - number of knowledge institutions with an increased participation of students from minorities - education system represents needs of labour market/gender - graduate satisfaction (employed/non employed/self-employed) (male/female)

<p>relevant knowledge - more inclusive educational environments (widened participation)</p>	<p>- employers' satisfaction over the graduates' skills and knowledge</p> <ul style="list-style-type: none"> ➤ <i>Research</i> <p>- number of research results/contributions translated into policy advice at national, regional or local level</p> <ul style="list-style-type: none"> ➤ <i>Society</i> <p>- number of beneficiaries reached with knowledge, skills and techniques (indirectly**)</p> <ul style="list-style-type: none"> - number of services to community (indirectly**) - number of businesses co-investing in activities - number of improvements in (inter)national policies/laws (indirectly**)
<p>II. Partnerships between persons and organisations are inclusive and sustainable</p>	<p>- number of MoUs or other types of formal collaboration agreements exist 1, 3, 5 years after end of project</p> <ul style="list-style-type: none"> - number of joint (research) proposals submitted and financed - number of joint publications - number of joint/double degrees offered <p>- number of academic staff of partner country still cooperates with academic staff of other education organisation(s)</p> <ul style="list-style-type: none"> - number of scholarship holders that became members of the alumni association of their host university (of applied sciences) (male/female) (NL/other) - number of Dutch training education organisations that have improved their training methods - number of staff of Dutch training education organisations that have gained new insights and ways of working
<p>III. Organisations key to (sectoral) inclusive development of partner countries are strengthened by inflow of enhanced workforce</p>	<ul style="list-style-type: none"> ➤ <i>Individual</i> <p>- % of alumni who state that they have applied in their workplace the knowledge and skills gained from the interventions</p> <ul style="list-style-type: none"> - % of alumni promoted to more strategic positions within their own organisation or other organisation - narratives from alumni on policy and procedural changes, inclusive development, and innovations as a result of interventions <ul style="list-style-type: none"> ➤ <i>Organisational</i>

	<ul style="list-style-type: none"> - % employer satisfaction on suitability of the training for the organisation - % of alumni still employed by the organisation that nominated them - % employers that states that their department/organisation has become more effective because of OKP intervention - % of alumni who have applied the acquired knowledge and skills within their working environment - testimonials from employer
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Outcomes at project level	
Outcome	Indicator
<p>A. TVET/HE organisations (in the selected partner countries and in NL) perform better their core tasks, firmly embedded in their environment, in line with country/regional specific labour market needs & aiming at inclusiveness</p>	<ul style="list-style-type: none"> ➤ <i>Education</i> <ul style="list-style-type: none"> - number of knowledge institutions supported directly - increased participation of students from minorities - number of teachers/ trainers have gained qualitative and relevant knowledge and skills to develop and offer the revised/developed study programmes (# trainers trained, male/female/minorities/PhD/MSc/short training) - number of graduates delivered (male/female/minorities degree/non-degree) (directly*) - number of curricula for degree, non-degree and short courses revised/newly developed - number of students enrolled in revised/newly developed study programmes (male/female) - student satisfaction (male/female) ➤ <i>Research</i> <ul style="list-style-type: none"> - number of research strategies/agenda/methodologies revised/strengthened and implemented - number of relevant publications (level, gender, inclusion) - number of relevant innovations ➤ <i>Society</i> <ul style="list-style-type: none"> - number of beneficiaries reached with knowledge, skills and techniques (directly*) - number of MoUs or other types of collaboration agreements signed (education, private, public, surrounding

	<p>community) (in NL, own country, other country)</p> <ul style="list-style-type: none"> - number of students performing an internship or practical work (male/female) - number of SMEs supported - number of improvements in (inter)national policies/laws (directly*) <p>➤ <i>Organisational</i></p> <p>- improved gender equality and gender awareness in the knowledge institution</p> <ul style="list-style-type: none"> - number of organisations revised/developed and implemented a strategic plan - number of organisations revised/developed institutional mechanism for quality assurance - number of organisations with a revised/developed system to register and monitor its alumni - number of organisations have developed and implemented a system to regularly survey the satisfaction of students, short courses participants, graduates and/or employers - number of laboratories established/strengthened - number of libraries/resource centres established/strengthened - % of men and women in management of faculty/department - % of men and women of teaching staff of faculty/department - number of organisations with improved policies or procedures to encourage access to education of minorities <p>- diversity in participation of project activities for management and teaching staff (i.e. balance junior/senior staff, women/men, minorities)</p> <ul style="list-style-type: none"> - number of organisations with policies and procedures to ensure an environment which is gender sensitive - number of organisations with policies and procedures to ensure an environment which is conducive for minorities
<p>B. Enhanced knowledge and skills of individuals and organisations (in partner countries and in the NL) in line with</p>	<p>➤ <i>Individual</i></p> <ul style="list-style-type: none"> - number of scholarship holders that have successfully completed course/training (level/male/female/minorities) - % scholarship holder's/alumni satisfaction - % of scholarship holders/alumni employed post-study within region and same employer (men/women) - % of scholarships awarded to women - % of scholarships awarded to minorities

<p>country/regional specific labour market needs & aiming at inclusiveness</p>	<ul style="list-style-type: none"> - % of quota for scholarships for women - % of quota for scholarships for minorities - number of stimulating measures/extra facilities aimed at preparation, supervision and aftercare of female candidates - number of stimulating measures/extra facilities aimed at preparation, supervision and aftercare of minorities - % alumni who state that they have acquired new knowledge and skills; e.g. problem solving, effective communication - % alumni who are promoted to a more strategic position post-study - changes in personal, academic and professional attitudes and attributes through training and education programmes - improved gender equality and gender awareness in the workplace <ul style="list-style-type: none"> ➤ <i>Organisational</i> - number of organisations strengthened by individual and/or group training (private/public) - % of alumni who have applied the acquired knowledge and skills within their working environment - employers satisfaction on the added value of return scholars to the initial working environmental - number of organisations with institutional mechanism for quality assurance - number of organisations developed and implemented a gender strategy
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* Direct: target group who have been reached during project period by the new or revised outreach programme or have followed the new or revised curricula/short courses.

** Indirect: target group reached beyond the project period by graduates of the new or revised curricula/short courses.