

Myanmar - Country Plan of Implementation Orange Knowledge Programme

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List of abbreviations

CARTC	Central Agriculture Research and Training Center (in-service training)
CPI	Country Plan of Implementation
CSA	Climate Smart Agriculture
ECD	Environment Conservation Department
EKN	Embassy of the Kingdom of the Netherlands
FNS	Food and Nutrition Security
GGG	Global Green Growth Institute
HE	Higher Education
ITC	Irrigation Training Center
IWRM	integrated Water Resource Management
MoALI	Ministry of Agriculture, Livestock and Irrigation
MMU	Myanmar Maritime University
NWRC	National Water Resources Committee
NESP	National Education Strategic Plan
NFP	Netherlands Fellowship Programme
NICHE	Netherlands Initiative for Capacity Development in Higher Education
Nuffic	The Dutch organisation for internationalisation in education
NWP	Netherlands Water Partnership
OKP	Orange Knowledge Programme
PSD	Private Sector Development
SAI	State Agricultural Institute
TOC	Theory of Change
TVET	Technical and Vocational Education & Training
YTU	Yangon Technical University

I. Introduction

This document describes the purpose and intentions of the implementation of the Orange Knowledge Programme (OKP) in Myanmar. It follows on an identification process in which capacity needs in the Myanmar have been analysed in the light of the available information and discussions with stakeholders. This approach has helped to define the priority intervention area(s) and to formulate the outcomes to be achieved.

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 the Myanmar Country Plan of Implementation (CPI).

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 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.

The Orange Knowledge Programme will be implemented through three types of interventions:

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

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

III. Current state of affairs

In the 2008 Constitution Myanmar has shifted to a democratic governance system with a civilian-led government and two parliaments with elected representatives in 2011.

The government is making efforts to end armed conflicts, undertake national reconciliation and establish peace within the country's borders. Following the recent handover to a civilian led government, international sanctions are being reviewed. Foreign investment is expected to increase in the coming years. Myanmar's recent economic growth has been impressive. The agriculture sector in Myanmar occupies a dominant position in the development of the national economy and has a definite bearing on other socio-economic activities. About 75% of the total population reside in rural areas and are principally employed in the agriculture, livestock, and fishery sectors for their livelihood. Myanmar, a lower-middle income economy with a GNI per capita of \$1,455 in 2017, is one of the fastest growing economies in the East Asia and Pacific region and globally. The GDP growth rate for 2016/2017 was 6.4 percent and is expected to remain the same in 2017/18, growing to 6.7% in 2018/19 and 7 percent in 2019/2020, mainly driven by services, industry and agriculture. Poverty in Myanmar has declined from 44.5% in 2004 to 37.5% in 2009/10 and 26.1% in 2015, according to the recent Myanmar-World Bank joint poverty analysis. However, poverty remains substantial, especially in rural areas where people rely on agricultural and casual employment for their livelihoods. Those who live near the poverty line are susceptible to economic shocks. Growth may be hampered by challenges including the ongoing and incomplete peace process with multiple ethnic armed organisations and the crisis in Rakhine State. The country must continue to improve its investment climate, banking sector and strengthen its implementation capacity on major reform programmes. Myanmar is a country abundant of natural resources, a young workforce and a lot of potential. However, as an emerging economy there are still many issues in the regulatory framework, in the financial architecture, and in the skills and capacity of the workforce. Therefore, Myanmar provides an excellent opportunity to implement the Dutch aid-and-trade approach. The ongoing NICHE programme encompasses two ongoing projects in (i) Capacity development on Integrated Water Resources Management in Myanmar and (ii) Vocational training in agriculture. NFP tailor made training has also focused on water and agriculture (see annex 2).

IV. Identification of the needs

This section describes the main outcomes of the needs assessment and covers the gender/inclusion and labour market situation in relation to post-secondary education in the context of the selected priority themes.

The selected priority themes

1. Food and Nutrition Security (FNS) specifically Agriculture, which includes Livestock and Aquaculture;
2. Water efficiency, sustainability and equitability, ensuring the needs of all sectors and the environment

Analysis of the priority themes

Theme 1: Food and Nutrition Security (FNS) specifically Agriculture, which includes Livestock and Aquaculture

Myanmar is an agricultural based country and the agriculture sector is the backbone of its economy. It contributes to 34% of Gross Domestic Product (GDP), 30% of total export earnings, and employs 56% of the labour force. About 75% of the total population reside in rural areas and are principally employed in the agriculture, livestock, and fishery sectors for their livelihood. Rice is historically the most important and dominating crop. Despite the enormous potential of the agricultural sector, it has underperformed in the last fifty years. It is expected that the population will grow to about 60 million in 2030 and the demand for rice and other agricultural produce for consumption will grow.

Myanmar's economy is heavily reliant on the agricultural sector and extractive industries. In order to achieve sustainable economic development, Myanmar needs to reduce its reliance on natural resources and expand the services and manufacturing sectors. At the same time, there is a need to use modern technology to produce quality products in the agricultural sector.

Theme 2; Water efficiency, sustainability and equitability, ensuring the needs of all sectors and the environment.

Myanmar has abundant water resources at the national scale. It has more water per capita than all the neighbouring countries. Most of its water resources are within the national borders and 3 out of 4 are national rivers. However, there is inability to access water and to properly manage increasing local and seasonal variability of supply due to climate change. Resulting droughts and floods negatively affect livelihoods and economic development. Rapid development and change are putting pressure on water resources, with emerging risks of cross-sectorial competition, over exploitation and pollution. Much of the prevailing poverty and food insecurity is caused by improper water management.

The Embassy's objectives in the field of post-secondary education, relevant to the themes

Myanmar has an indicative total allocation of €688 million of EU's support under the Multi-annual Indicative Programme 2014-2020. The Netherlands contributes the following total EU allocations: Rural development, agriculture and food and nutrition security (€241 million) and Education (€241 million).

In 2012, Myanmar expressed interest in cooperating with the Netherlands in managing its water challenges. For that reason, both countries signed a Memorandum of Understanding (MoU) on cooperation in the field of Integrated Water Resources Management (IWRM).

Since 2013, the Netherlands assists Myanmar in capacity building in IWRM: in these years university cooperation, learning by doing projects and feasibility studies have been executed. In 2017, the Delta Core Team in the Hague and the embassy, anticipating on the ending of the 3-year funding, developed a strategy focussing on the core interventions in the Yangon Urban Delta. In short Dutch knowledge on IWRM, resilient cities and the agro-water nexus will

help Myanmar and the major investors to make the right decisions for large scale infrastructural projects. Technical support focusses on assisting master planning to take into account long-term sustainability and financial feasibility, helping Myanmar in its rights-based development and in its diverse relations with other donors to avoid as much as possible unintended negative consequences.

Based on the existing MoU, the Dutch support has been concentrated on strategic cooperation in the Ayeyarwady Delta. However, it is clear that a substantial part of future investments and most of the strategic interventions will be done in the Greater Yangon area. The Dutch International Water Ambition (IWA) is also focusing on urbanising deltas.

An ongoing NICHE project was formulated (see annex 2) to cover capacity building in water education.

For the Netherlands embassy capacity building is considered a key success factor for integrated development of water resources and is required at all levels. For Myanmar it is important to upgrade the ability and capacity to analyse and predict behaviour of the Delta and effects of interventions (disaster risk mitigation, and mitigating risks of interventions for water quality and availability). Within the new Orange Knowledge Programme (OKP), relations between Myanmar and Dutch knowledge institutes will be strengthened.

A second MoU, endorsed in May 2015, covers cooperation in the field of agriculture, food safety, livestock, fisheries and farmers' organisations. Joint efforts should generate more income and employment for rural people, improve the provision of safe and healthy food, and increase the Gross National Product and export earnings. At the same time, long term sustainability should be ensured of the agriculture sector as a whole and of ecosystems supporting the sector and the rural economies. An ongoing NICHE project was formulated (see annex 2) to cover the missing element in capacity building in agriculture education.

Mostly based on this MoU, the current Myanmar Netherlands Agricultural Programme (MNAP) is ambitious and driver for many modernisations and transitions in Myanmar, such as seed organisation and integrated seed sector development, modernising farmers co-operatives, sector and value chain developments, with focus on horticulture (e.g. vegetables, potatoes, flowers, pulses and beans) and livestock. For livestock the plan focused initially on poultry with 2 multi-year programmes and for fisheries on export to EU and is currently investigating NL- (business and governmental) support to the development of a dairy sector. This specific sector is currently effectively not existing, leading to huge and costly import of all kinds of dairy products. Together with research institutes and private sector parties the bilateral programme of the Netherlands with Myanmar promotes the development of multi-year programmes on soils. It also covers capacity building to help Myanmar to develop e.g. the Plant Protection Division of the Ministry of Agriculture Livestock and Irrigation to become the international recognised Competent Authority for phytosanitary affairs

Structure of the current status of the provision of post-secondary education in the priority themes selected

Myanmar has 171 higher education institutions (colleges, degree colleges and universities), which are overseen by eight ministries. In the 2015 academic year, there were 225,178

students studying full-time in HEIs under the responsibility of the Ministry of Education, while an additional 411,164 students were accessing higher education through Distance Education Universities.

Access to technical and vocational education and training in Myanmar is provided by relevant ministries and the private sector through 372 technical and vocational education and training centres.

The needs of higher education in Myanmar are extensive. The entire system requires a complete renovation, from the physical infrastructure to the academic curriculum, and to the capacity of administrative and academic staff. The physical infrastructure is in a serious need of repair or replacement. Some of the laboratories are outdated with equipment that often was purchased back in 1960's. Most of the curricula being offered are outdated. There is need for emphasis on English language training. The quality of instruction is poor. Many existing faculty members do not have post-graduate degrees. They do not have experience in peer review, managing projects engaging on international collaboration. And also many do not have the experience of the close connection between research and teaching. There is no access to digital journals because of the poor state of the internet and the lack of information technology infrastructure, software and hardware, and computer models hamper the linking and networking among universities, professionals, and students. The new National Education Strategic Plan (NESP)¹ is a comprehensive, widely-owned and evidence-based roadmap intended to reform the entire education sector over the next five years, from 2016-2021.

The agricultural education system in Myanmar includes three universities, all under different ministries and focused on different segments of the agricultural sector. The Yezin Agricultural University, under the Ministry of Agriculture Livestock and Irrigation, covers crop sciences and in addition offers some courses in animal sciences and fisheries. Yezin Agricultural University also operates seven regional research stations where it deploys students to conduct research during their final year. The University of Veterinary Science offers veterinary sciences and fisheries but not crop agriculture. The University of Forestry under the Ministry of Environmental Conservation specializes in issues of land management, environment and forestry.

In addition to these degree-conferring institutions, seven State Agricultural Institutes (SAI)² offer the agricultural education diploma programme for high school graduates since 1955. .

Students gain a Diploma in Agriculture after they completed three-year studies. The top ten outstanding students can join the third-year study of undergraduate programme at YAU for pursuing a Bachelor of Agricultural Science Degree if they pass the entrance examination.

The water education system is still limited and covers universities which deliver professionals with specialization in water resources management, the Yangon Technological University, and the Mandalay Technological University both supervised by the Ministry of Science and Technology, the Maritime University of the Ministry of Transport and the Forest University of the Ministry of Environmental Conservation and Forestry which offers courses on watershed management. There are no vocational training schools that specifically focus on water

¹ http://www.moe-st.gov.mm/wp-content/uploads/2018/01/NESP_20Summary_20-20English_20-20Final_20-20Feb_2023.pdf

² Pyinmana SAI, Thahtone SAI, Myaungmya SAI, Shwebo SAI, Patheingyi SAI, Pwintphyu SAI, and Tharyarwady SAI

education. The water education sector is characterised by higher numbers of female students and teaching staff.

Analysis of the education and training gap in the priority theme

Myanmar currently is facing two major challenges to expand priority development sectors:

- (a) a shortage of skilled workers, despite increased job opportunities;
- (b) limited governance and public sector management capacity.

High-quality higher technical and vocational education and training that equips Myanmar's economy with a skilled and competitive workforce is vital for sustainable socio-economic development. In the coming years a large number of skilled employees will be needed for the agricultural, water, energy, manufacturing, infrastructure, livestock, fisheries and tourism sectors. To address this demand the higher and TVET system will need to equip learners with the knowledge, skills and competencies to achieve their career aspirations and contribute to economic growth.

Higher education is responsible for nurturing skilled human capital needed in government, business and industry. Higher education institutions (HEIs) have a key role to play in undertaking research and incubating the innovative and creative thinking needed for globally and economically competitive society.

The three major challenges facing TVET/higher education in the priority sectors are:

- High-quality, accessible and integrated TVET/higher education is a pre-requisite for increasing employment, poverty reduction and sustainable economic growth. Demand-driven TVET/higher education that is accessible to school leavers. It plays an important role in addressing youth unemployment and boosting Myanmar's economy;
- Enhancing the quality of TVET/higher provision is critical in order to sustainably provide employment to meet the increasing demand from both school leavers and employers;
- Management and co-ordination need to be strengthened through a more cohesive legislative and policy framework that covers the entire TVET/higher education sector.

The objective of the TVET/higher education policy of the government of Myanmar is to equip learners with the knowledge, skills and competencies that will enable them to find employment and achieve their career aspirations. The ongoing NICHE project 'Strengthening Agricultural Vocational Education and Training Schools in Myanmar' that started in 2017 is aiming for that objective as well.

1. Food and Nutrition Security (FNS)

The number of challenges Myanmar faces is large. OKP Support to Agricultural Institutes is essential in the following areas:

- Adapt agricultural curricula to Higher Education Applied Sciences level;
- Including teacher training;

- Increasing labour market focus including internships, agrobusiness workshops and mini enterprises skills development;
- Training more middle level agro-technicians;
- Increasing awareness with students at different universities around agri-business/farm management, marketing-inputs, finance, value chain analysis;
- Strengthening embedding of curriculum at agricultural Research centres linked to MOALI for system change.

2. *Water efficiency, sustainability and equitability, ensuring the needs of all sectors and the environment*

The knowledge gap in the water sector is substantial. Currently, several initiatives are being formulated, under the auspices of different donors and funds, to improve capacity building and education in the field of IWRM and water governance. Capacity building is considered a key success factor for integrated development of water resources and is required in all levels. Relevant aspects for capacity building are:

- Strengthen existing capacity of key Ministerial departments;
- Capacity building at Universities and Ministerial training centres and include more 'learning by doing';
- Build up the knowledge and experience on integrated water resource management in the two deltas;
- Upgrade the ability and capacity to analyse and predict behaviour of the Delta and effects of interventions (disaster risk mitigation) in order to enhance water management for food security;
- Tackle data management; sharing Monitoring and Evaluation data in a structural way and monitoring of baseline data tidal rivers/ground water;
- Enhance awareness of local water users;
- Build up a structured and holistic research programme for climate change impacts and adaptation.

V. Envisaged Theory of Change and outcomes

Based on the analysis of needs and the consultations with the stakeholders, a theory of change for Myanmar has been formulated in (i) Food and Nutrition Security (FNS) and (ii) Water.

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](#). 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 Myanmar aims at the following objectives, outcomes and impact:

Global Outcome Agro FNS & Water: The OKP programme contributes to efficient water management in climate smart and inclusive agriculture for ecologically sustainable food security in Myanmar.

The OKP programme in Myanmar aims at the following objectives, outcomes and impacts:

Objectives:

Contribute to End hunger, achieve food security and improved nutrition and promote sustainable agriculture (SDG 2) and ensuring availability and sustainable management of water for all (SDG 6).

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

1. Promote agricultural growth;
2. Water is used sustainably and equitably, ensuring the needs of all sectors and the environment;
3. Water efficiency in agriculture increased.

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

- (I) Education system (HE/TVET) 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**:

- 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 Myanmar / regional specific labour market needs & aiming at inclusiveness);
- B.** Enhanced knowledge and skills of individuals and organisations in line with Myanmar / regional specific labour market needs & aiming at inclusiveness (in Myanmar and in the NL).

Annex 3 describes the Theory of Change for Myanmar for Food and Nutrition Security (FNS/ and Water efficiency, sustainability and equitability, ensuring the needs of all sectors and the environment.

Annex 4 provides an M&E matrix presenting the expected outcomes and connected indicators for the OKP country programme.

VI. Articulation of demand and supply

The OKP offers different kind of capacity building interventions (see Annex 1):

1. partnership projects between TVET and higher education institutions locally and with the Netherlands;
2. Tailor-Made Training courses (TMT) for groups;
3. individual scholarships for mid-career professionals;
4. Alumni events.

Nuffic will publish calls for institutional cooperation projects and group training. Based on those calls, key organisations in Myanmar and in the Netherlands are invited to submit proposals that are aligned with the CPI and contribute to the ToC outcomes and impact in annex 3 and 4. Please refer to the [policy framework](#) that underlies the OKP and an explanation of the [various modalities](#).

For scholarships, please consult the [OKP scholarship website](#). For updates on calls and other OKP information, please register via the [OKP updates website](#).

Preliminary planning of implementation

Step	Date
CPI published on Nuffic website	February 2019
First call published	1Q2019
Deadline call	t.b.d.
Selection partners	t.b.d.
Start of project in case joint proposals	2Q2019

VII. Indicative budget for the programme

Period of implementation 2019 – 2022	Efficient water management in climate smart agriculture for food security
Institutional projects	EUR 2,240,000
Tailor-Made Training +	EUR 400,000
Tailor-Made Training and other Group training	EUR 360,000
Individual scholarships	EUR 1,000,000
Alumni events	PM
Total EUR	EUR 4,000,000

*) The budget for Tailor-Made Training, other Group training and Individual scholarships is managed centrally and will be divided as much as possible evenly over all full programme countries provided that sufficient eligible and quality applications will be received.

Note: The funds allocated to the programme as a whole and to each partner country's programme may be subject to change. The budget may also change in line with political decisions taken by the authorities. As a consequence, Nuffic reserves the right to adjust this indicative budget and, it will notify the relevant parties immediately if adjustments are being made.

OKP promotes co-funding and matching of funds. Myanmar is classified by the OECD as an LDC ^[1]. Proponents applying for Tailor-Made Trainings and Institutional Partnership projects are encouraged to include co-financing in any form in their proposals. This will contribute to reciprocity and ownership of results established within the collaboration between all partners. Co-financing in the breakdown of budgets will be one of the assessment criteria in the selection of proposals.

VIII. Harmonisation and coordination with (inter)national projects and programmes

In consultation with the embassy, Nuffic will organise monitoring missions during which meetings will be arranged with the relevant authorities and other stakeholders (TFPs, NGOs, the private sector, etc.), for the purpose of discussing any contextual changes that could impact the implementation of the OKP programme. In addition, the two NICHE projects on (i) Capacity Development on Integrated Water Resources Management in Myanmar and (ii) Strengthening of Vocational Education and Training Schools in agriculture, livestock and irrigation will link the OKP initiatives to both priority sectors. The OKP initiatives will also be coordinated with the bilateral agricultural programme between Netherlands and Myanmar laid down in a multi-annual country strategy. The Netherlands Water Partnership joins Dutch public and private sector water partners operating in Myanmar and the OKP is already establishing contacts with this network agency. For the Netherlands government in their bilateral relations with Myanmar, Nuffic has been instrumental in strengthening of capacity in water/agriculture through its NICHE-and OKP programme. The programmes are also considered important pillars for sustainable development as well as for peace/security. OKP linkages will also strengthen the other bilateral programmes.

The New Zealand government assistance with vocational training support in the livestock/dairy sectors is already providing linkages with the ongoing NICHE project and is expected to continue with prospective OKP initiatives in the food security sector.

[1] OKP countries are classified in accordance with the list of Development Assistance Committee ([DAC list](#)) of the OECD.

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 OKP at programme level and will regularly discuss progress with EKN 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. NICHE and NFP
- Annex 3. Theory of Change for the OKP programme in Myanmar
- Annex 4. Monitoring and Evaluation Framework

Annex 1. Brief presentation of the Orange Knowledge 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 three instruments will be offered in the form of an integrated approach.

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-financing:*
Where worthwhile and possible, the programme must stimulate co-financing.
- *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 Description of the identification process

1	<p>NICHE-MMR-250: Capacity Development on Integrated Water Resources Management in Myanmar 10/8/2015-9/8/2019 Policy theme: Water Status project: Implementation Grant amount: € 999.967</p>
2	<p><i>Implementing partner</i> : Delft University of Technology Consortium partner : Deltares</p>
3	<p>Requesting Organisation : Yangon Technical University, Myanmar Maritime University</p>
4	<p><i>Project description</i> Universities in Burma/Myanmar are expected to be essential contributors to economic development through their role in producing the knowledge, skills, and innovations needed to foster knowledge on Integrated Water Resources Management. The University graduates have knowledge, maybe not up to date, but have difficulty applying the knowledge because of the learning process in their institutions. Often the University staff lack any industry experience. There is a lack of physical infrastructure. University programs lack any form of internships, so that students become better acquainted with the nature of the industry and their future occupation. In line with the above mentioned, with the support of the NICHE project, Universities expect to be enabled to deliver new generations of water professionals with “broader view” and updated knowledge and skills, able to apply the interdisciplinary approach needed for the IWRM issues, and able to work together with professionals from different disciplines and agencies. The participating universities expect to pursue the following three capacity focus areas through the NICHE project: Academic capacity: Universities are enabled to deliver new generations of water professionals with updated knowledge and skills so to understand the challenges for an interdisciplinary approach needed for IWRM issues; Organisational capacity: Universities have increased managerial and financial skills to develop outreach/marketing strategies, and to analyse the new skills necessary to function under the new framework of the education law; Building links: Through promoting linkages and partnerships the water professionals in Myanmar have increased skills to facilitate coordination among agencies, sectors and stakeholders in the water sector</p>
5	<p><i>Main objective of the activity</i> At the end of the project the requesting organisations will have the academic and organisational capacity to deliver professionals with knowledge and skills that enable them to apply an integrated and gender sensitive approach towards water resources management in Myanmar</p> <p><i>Outcomes on policy priority level</i> Livelihoods of women and men are improved through increased capacity of the new generations of water professionals to safeguard the sustainable and integrated management of the country's water resources</p>

6	<p><i>Outputs (Myanmar specific)</i></p> <p>Degree Education: Upgraded and newly project developed gender and labour-market responsive degree education is in place and offered at YTU (ME, MSc and PhD in Water Resources Engineering') and MMU (ME in 'River and Coast' and 'Port and Harbour') and material is also available for other institutions (e.g. Mandalay Technological University)</p> <p>Professional Education: Course programmes and course curriculum and material are in place for professional courses and extension classes in various aspects of IWRM at YTU and MMU.</p> <p><i>Institutional Capacity:</i> Institutional capacity and facilities at YTU and MMU are strengthened to be able to deliver broad IWRM programmes at degree and professional level and an enabling environment is created at the universities to deliver those programmes, continuously improve them, and attract sufficient course participants, both male and female.</p> <p><i>Academic Capacity:</i> Knowledge (in broad IWRM subjects) and skills (e.g. research, link with labour market, design of education material, teaching methods, pedagogy, academic English etc.) of academic staff of YTU and MMU is upgraded. Network: Linkages are created with the labour market (both public and private, both Myanmar and Dutch), with other universities and research institutes in the SE Asia region and the outside world</p>
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NICHE-MMR-277: Strengthening of Vocational Education and Training Schools in Myanmar 21/11/2016 – 20/11/2020	
1	Policy theme: Agriculture Status project: Implementation Grant amount: € 2.126.534
2	<p>Implementing partner</p> <p>Aeres Group</p> <p>Consortium partners</p> <p>MDF Training and Consultancy B.V.</p> <p>Stichting Dienst Landbouwkundig Onderzoek – Centre for Development Innovation</p>
3	<p><i>Requesting Organisation</i> :Ministry of Agriculture, Livestock and Irrigation - Department of Agriculture</p>
4	<p><i>Project description</i></p> <p>Burma/Myanmar's agriculture has underperformed over the past fifty years, which translates in low productivity, innovation and regional competitiveness. The low farm productivity translates into high rates of poverty and food insecurity, with about one quarter of the population falling below the national poverty line. Currently formal agricultural TVET education is offered by the 14 State Agricultural Institutes (SAI) that fall under the financial and administrative accountability of Department of Livestock, Agriculture and Irrigation. The MoALI including the In-service Training Centre and State Agricultural Institutes Division (CARTC) expects that after the project it will have the academic and organisational capacity to develop curricula for the SAIs in a number of</p>

	topics like plant protection, horticulture, floriculture, seed production, irrigation systems, soil and water management, etc. The five pilot State Agricultural Schools (SAI's) will be able to develop, implement and maintain an agricultural educational programme with regional specialisations that delivers graduates that respond to the demands of the labour market.
5	<p>Main objective:</p> <p>Enhanced capacity at the Ministry of Agriculture, Livestock and Irrigation to coordinate, develop and implement the key transformations in the agricultural TVET system;</p> <p>Enhanced capacity at the selected State Agricultural Institutes to deliver graduates that possess adequate (competency-based and labour market oriented) region specific and gender sensitive entrepreneurial, extension and management skills and knowledge</p> <p>Outcome on policy priority level</p> <p>Sustainable food security and economic growth meeting national needs</p>
6	<p><i>Outputs (Myanmar specific)</i></p> <p>1.1 : A labour market driven AVET policy, including approved occupational standards, developed and implemented with major stakeholders</p> <p>1.2: Selected staff members of MoALI and pilot SAIs, participating in National Education Support Team, equipped with methods and skills for developing/revising a practice-oriented, gender-inclusive curriculum</p> <p>1.3: Capacity developed of MoALI in cooperation with knowledge institutes to support technical staff training for priority sectors</p> <p>2.1 Selected staff members of SAI participation I National Education Support Team, equipped with methods and skills for developing/revising a practice-oriented, gender-inclusive curriculum</p> <p>2.2: Capacity developed at SAI in cooperation with MoLAI and knowledge institutes for technical training and updating of staff.</p> <p>2.3 At the 5 pilot SAIs, region-specific labour market oriented and gender sensitive competency profiles will be developed and will result in the revision and implementation of improved study programs for agricultural adviser and entrepreneur/farmer, based on the approved occupational standards and with proper quality assurance</p> <p>2.4 The 5 pilot SAIs are involved in training and advisory services to farmers</p> <p>2.5: Basic ICT infrastructure and applications for all 14 SAIs implemented/in place and stimulates cooperation. Exploration of ICT based learning</p>

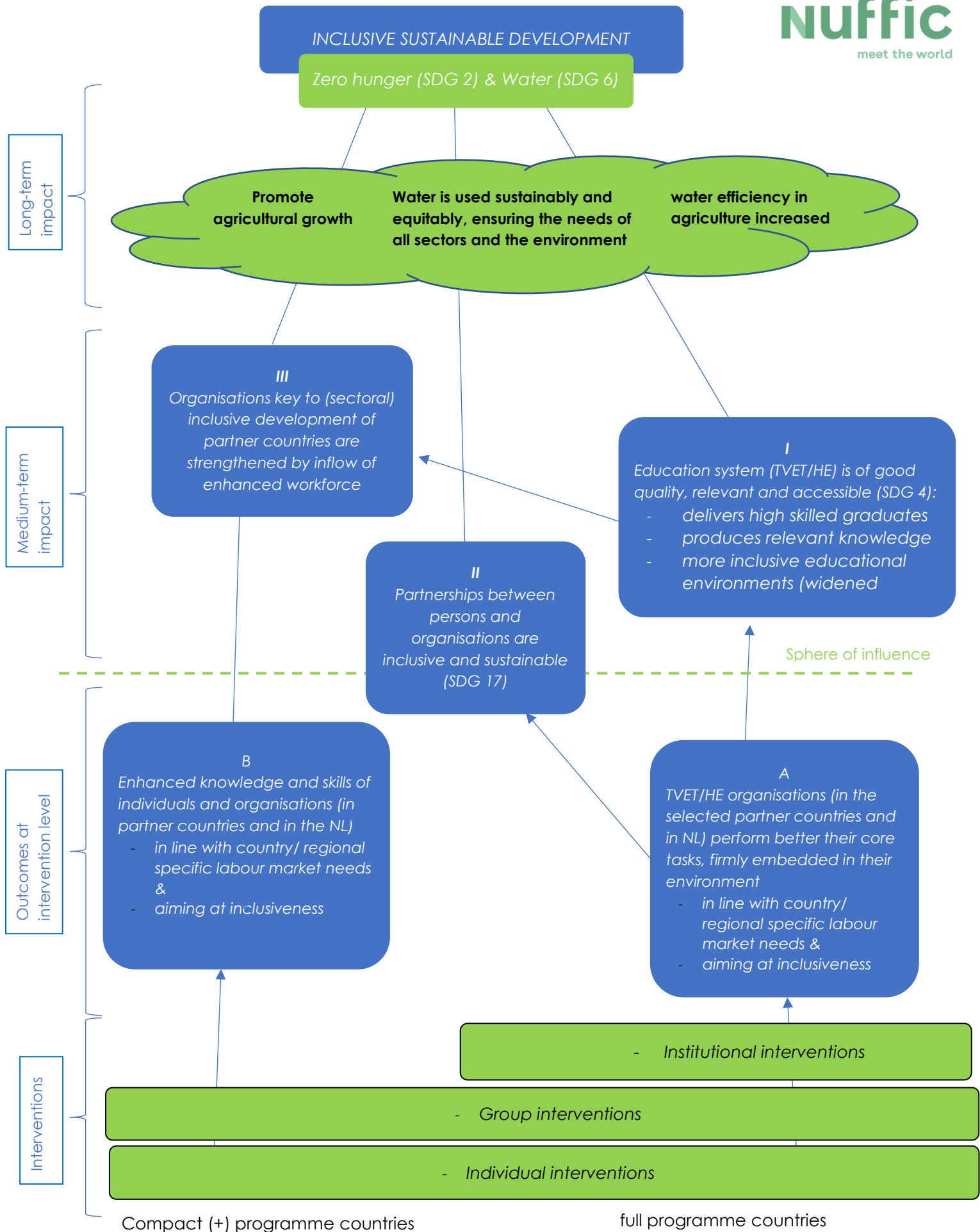
NFP

2015 - 2018 NFP Scholarships								
Programme	Gender	Applications	Scholarships awarded	Policy theme				
				SRL	Water	SRHR	FNS	Other
NFP - MA	F	19	5			1	1	3
	M	14	0					

NFP - PhD	F	4	2			1		1
	M	1	0					
NFP - SC	F	99	20				13	7
	M	179	8				6	2
Total		316	35			2	20	13

NFP Tailor-Made Training

Myanmar	Food security	Golden Plain Livelihood Development Services Co-Op	MDF Training & Consultancy	Capacity Building for Growth: a project to develop and strengthen the Myanmar organization Golden Plain	1-8-2014	31-12-2014
Myanmar	Other	Yangon City Development Committee	IIAS - International Institute for Asian Studies of Leiden University	Consequence of Climate Change for Planning, Design and Management in Yangon, Myanmar	3-11-2014	14-11-2014
Myanmar	Water and sanitation	Yangon City Development Committee	Erasmus University Rotterdam (IHS)	Township Action Planning for Local Economic Development and entrepreneurship, Livelihood Enhancement and Flood Risk Management	1-1-2016	30-4-2016
Myanmar	Water and sanitation	Mandalay City Development Committee	Erasmus University Rotterdam (IHS)	Township Action Planning (TAP) for affordable housing, income enhancement, local economic development and flood risk management	1-9-2017	30-11-2017
Myanmar	Food security	Ministry of Agriculture and Irrigation	Wageningen UR Centre for Development Innovation	Enhancing the capacity for increasing production and distribution of high quality seed of legumes and oilseed crops for improving food security in dry zones of	1-6-2016	7-7-2017
Myanmar	Water and sanitation	Mandalay Technological University, Department of Architecture	IIAS - International Institute for Asian Studies of Leiden University	Urban Spatial Planning and Water Resilience for Mandalay, Myanmar	26-9-2016	6-10-2016
Myanmar	Water and sanitation	Mandalay Technological University, Department of Architecture	Universiteit Twente, Faculteit ITC	Next generation regional satellites and modelling techniques for integrated water management	1-9-2016	31-8-2017



Annex 4. Monitoring & Evaluation Frameworks of the OKP programme in Myanmar

- This matrix is intended to make clear that all FNS and water interventions within OKP should be geared to contribute coherently and measurably to common long term impacts, as defined by the Ministry of Foreign Affairs of the Netherlands (<https://www.dutchdevelopmentresults.nl/theme>);
- It is important to be aware that this matrix 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, this matrix can be made more specific by focussing on a specific long-term impact or choosing more compulsory indicators, depending on the country focus.

Objective:			
Contribute to end hunger, achieve food security and improved nutrition and promote sustainable agriculture (SDG 2) and ensuring availability and sustainable management of water for all (SDG 6) through the strengthening of capacity, knowledge and quality of individuals as well as key 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 ToC)			
Long term impact	Long term impact indicator	Medium-term indicator	Outcome indicator (at project level)
1. Promote 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: % < 35) whose farming enterprise became more resilient to shocks (indirectly**) 	<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 more resilient to shocks (directly*)
2. Water is used sustainably and equitably, ensuring the	Number of people having enough water of good quality throughout the year	<ul style="list-style-type: none"> - number of river basin delta organisations supported on water management (indirectly) - number of professionals trained in water management (indirectly) 	<ul style="list-style-type: none"> - number of river basin delta organisations supported on water management (directly) - number of professionals trained in water management (directly)

needs of all sectors and the environment		<ul style="list-style-type: none"> - number of people benefitting from operational plans for integrated water resources management of basins (indirectly) - area of basins with an operational plan for integrated water resources management (indirectly) - number of people supported for protection against floods (indirectly) - number of people supported for improved irrigation and drainage (indirectly) - number of people supported for improved watershed protection (indirectly) number of people supported for safe drinking water and adequate sanitary facilities (indirectly) 	<ul style="list-style-type: none"> - number of people benefitting from operational plans for integrated water resources management of basins (directly) - area of basins with an operational plan for integrated water resources management (directly) - number of people supported for protection against floods (directly) - number of people supported for improved irrigation and drainage (directly) - number of people supported for improved watershed protection (directly) number of people supported for safe drinking water and adequate sanitary facilities (directly)
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 benefitting 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 applications in water-efficiency ranging from crop selection to irrigation scheduling etc.,. - 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) 	<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 '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)

Medium-term impact	Indicator
I. Education system (TVET/HE) is of good quality, relevant and accessible	<ul style="list-style-type: none"> ➔ <i>Education</i> - 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

<ul style="list-style-type: none"> - delivers high skilled graduates - produces relevant knowledge - more inclusive educational environments (widened participation) 	<ul style="list-style-type: none"> - 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) - employers' satisfaction over the graduates' skills and knowledge → <i>Research</i> - number of research results/contributions translated into policy advice at national, regional or local level → <i>Society</i> - number of beneficiaries reached with knowledge, skills and techniques (indirectly**) - 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>	<ul style="list-style-type: none"> - number of MoUs or other types of formal collaboration agreements exist 1, 3, 5 years after end of project - number of joint (research) proposals submitted and financed - number of joint publications - number of joint/double degrees offered - number of academic staff of partner country still cooperates with academic staff of other education organisation(s) - 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> - % of alumni who state that they have applied in their workplace the knowledge and skills gained from the interventions - % 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 - <i>Organisational</i> - % 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 employers on organisational changes (implemented procedure/techniques, work ethic etc. due to trained staff (critical mass))

Outcomes at project level	
Outcome	Indicator
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>→ <i>Education</i></p> <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) <p>→ <i>Research</i></p> <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 <p>→ <i>Society</i></p> <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 community) (in NL, own country, other country) - 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> <ul style="list-style-type: none"> - improved gender equality and gender awareness in the knowledge institution - 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

	<ul style="list-style-type: none"> - number of organisations with improved policies or procedures to encourage access to education of minorities - diversity in participation of project activities for management and teaching staff (i.e. balance junior/senior staff, women/men, minorities) - 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
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<p>B. Enhanced knowledge and skills of individuals and organisations (in partner countries and in the NL) in line with country/regional specific labour market needs & aiming at inclusiveness</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 - % 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 <p>→ <i>Organisational</i></p> <ul style="list-style-type: none"> - 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.