# Inventory of Dutch partnerships in support of SHAEA

**Final report** 

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# 1. Introduction

The World Bank engaged in dialogue with the Regional Universities Forum for Capacity Building in Agriculture (RUFORUM) and is developing a regional project named Strengthening Higher Education for Agri-Food Transformation in Africa (SHAEA). SHAEA is a proposed regional loan of the World Bank to 6 African countries for the structural enhancement of agricultural faculties in a set of regional anchor universities. The aim is to improve relevance of agricultural higher education and research for labour markets and for evidence-based policy making on rural transformations in Africa.

In the context of the Netherlands – World Bank Group 'Food for All' – Partnership<sup>1</sup> the initiative was taken to offer support in the development phase of SHAEA and explore the possible future role of Dutch stakeholders related to agricultural higher education in the implementation phase. The new Orange Knowledge Programme (OKP) administered by Nuffic, on behalf of the Ministry of Foreign Affairs of the Netherlands, could be a good match in a collaborative effort with the Knowledge Platforms (Food & Business Knowledge Platform, INCLUDE), and/or the Borderless Network.

To create mutual benefit and set-up sustainable cooperation networks, one of the identified activities to support the development of SHAEA was an inventory of existing institutional relations (academic and professional education, scientific and applied research) between the Netherlands and Africa (in the SHAEA countries in particular).

It was also anticipated that the inventory would provide relevant inputs for the planned launching of the SHAEA project by mid-July 2018, and discussions on the needs to be addressed in the project. The inventory was commissioned to Nuffic by the Food & Business Knowledge Platform. The objectives of the assignment, as formulated in the Terms of Reference, were as follows:

- Provide an overview of current and past collaboration in agricultural higher education and research between education institutes in the Netherlands and designated African countries; The overview will involve the period 1 January 2015 – 31 December 2017. If feasible, different angles of institutional cooperation will be included in the overview.
- (2) Provide an analysis of opportunities for relevant institutional linkages in the future.

This report presents the draft findings of the inventory, carried out in the period June - September 2018. The inventory was completed with a special meeting / focus group discussion with stakeholders in the Netherlands on 18 September 2018. Relevant feedback from stakeholders on the draft report, as well as additional information on the Orange Knowledge Programme, have been integrated in the present final version of the report.

<sup>&</sup>lt;sup>1</sup> The Food for All Partnership was signed in 2015 among the Dutch Ministries of Foreign Affairs and Economic Affairs and the World Bank Group for a 5-year period. The underlying mission is to enhance development effectiveness in food and nutrition security and to leverage Dutch knowledge and expertise in a more pronounced role at the global scale. The approach is to a) find synergies between Dutch knowledge and expertise and Bank operations, b) help innovate the Bank's thinking in strategic areas of food systems with cutting-edge knowledge, c) develop longer term collaborations, often at country level investments.

The information provided in this report is correct and complete to the best of our knowledge. Nuffic disclaims any liability with respect to missing or incorrect information or the use of the information.

# 2. Scope and methodology

The inventory was aimed at providing an overview of partnerships and cooperation in agricultural higher education and research, between institutions in the Netherlands and nine prospective SHAEA countries: Kenya, Uganda, Ethiopia, Mozambique, Malawi, Ghana, Ivory Coast, Benin and Cameroon. Partnerships and cooperation engaged in the period 1 January - 31 December 2017, with a focus on one or more of the 6 SHAEA themes<sup>2</sup>, were of particular interest. The proposed methodology for the inventory included a desk study, a questionnaire, semi-structured interviews, and focus group discussions.

The desk study and the questionnaire were carried out simultaneously in the period June-July 2018. The desk study aimed to give detailed, quantitative information on partnerships implemented in the period January 2015 - December 2017. The study focussed on a selected number of instruments / programmes which facilitate institutional cooperation, linkages and partnerships in the area of agricultural development and food security, supported by the Dutch government and the EU.

A partnership is then defined as "an institutional, multi-annual cooperation between a number of different partners (consortium), involving at least two countries, in the framework of a project, funded by selected instruments / programmes".

The selected instruments / programmes and their key focus were:

- the Food & Business Global Challenges Programme (GCP) focus on research cooperation in a multi-stakeholder setting;
- the Food & Business Applied Research Fund (ARF) focus on research cooperation in a multistakeholder setting;
- the Research for Inclusive Development in Sub-Saharan Africa (RIDSSA) programme focus on research cooperation;
- the Netherlands Initiative for Cooperation in Higher Education (NICHE) I & II programme focus on institutional capacity building in education.
- the Erasmus+ programme focus on educational cooperation and student exchange;
- the Facility for Sustainable Entrepreneurship and Food Security (FDOV) programme focus on entrepreneurship development and food security, fostering multi-stakeholder cooperation and partnerships;
- the Netherlands Fellowship programme (NFP) II programme: (1) TMT's: focus on human resources development / organisational development (group trainings) of GOs, NGOs, knowledge,

<sup>2 1)</sup> Agribusiness and Entrepreneurship, 2) Agri-food Systems and Nutrition, 3) Rural Innovations and Agricultural Extension 4) Agricultural Risk Management and Climate Change Proofing 5) Agricultural Policy Analysis 6) Statistical Analysis, Foresight and Data Management

education and research institutes and private sector parties; and (2) refresher courses: focus on further training of NFP alumni;

• the PSD Apps - focus on the facilitation of private sector development.

A short description of above-mentioned programmes / instruments is presented in Annex 1. The inventory was based on a review of the databases of Nuffic (NICHE and NFP), Erasmus + programme and data derived from the International Aid Transparency Initiative registry (IATI) of Netherlands Enterprise Agency (RVO <u>https://aiddata.rvo.nl/</u>).

The questionnaire provided information on the involvement of Dutch higher education institutes in relation to SHAEA themes, as part of past and present partnerships, institutional cooperation and linkages in selected countries, and possible future interests. Special attention was given to key characteristics of the partnerships: content of cooperation (e.g. research collaboration, degree collaboration, student/staff exchange, capacity building, thematic scope etc.), the type of cooperation (e.g. project, longer term programme, partnership/network, country/regional), and the organizational level (central, faculty, department) involved.

The questionnaire was sent to the education institutes that form part of the Borderless Network: 1 agricultural research university, 4 universities of applied sciences specialized in agriculture, and agricultural regional vocational education colleges (via international coordinators). In addition, 4 other research universities - known for their involvement in agricultural programmes in Africa - were selected for the questionnaire. A total of 7 institutions filled in the questionnaire: HAS Den Bosch, ISS / Erasmus University Rotterdam, Wageningen University / Centre for Development Innovation (WU / CDI), Van Hall University of Applied Sciences (VHL), Aeres Group<sup>3</sup>, African Studies Centre / Leiden University (ASC / UL) and Amsterdam Centre for World Food Studies and the Centre for International Cooperation, VU Amsterdam (ACWFS/ CIS-VU).

The extent to which the questionnaire was completed varied. Not all institutions provided the requested information in the prescribed format. This made analysis tricky in some cases and required further follow-up. From the more detailed descriptions provided, links with countries and SHAEA themes were apparent. Only the examples that fit the scope of the inventory have been included in the findings presented in the following paragraphs.

Preliminary findings of the desk study and questionnaire were shared during the launching of SHAEA mid-July 2018 and a preparatory meeting with Dutch stakeholders on 9 July 2018. In consultation with the Food & Business Knowledge Platform, an additional focus group discussion was organised on 18 September 2018. The discussion focused on discussing the key findings of the draft report, informing key stakeholders on the state-of the art of the Orange Knowledge Programme (the recently published Country Plans of Implementation (CPI), and possibilities for synergy between OKP and SHAEA. The meeting replaced the semi-structured interviews that were to be conducted with Dutch institutes. The results of the meeting served as input for the final report.

<sup>3</sup> The responses received from: Aeres, Aeres University of Applied Sciences and Aeres MBO Barneveld have been compiled and are presented in this report under the name/title: Aeres Group

# 3. General findings

# 3.1 General findings desk study

A quantitative analysis of the partnerships established with support of these programmes / instruments, has revealed the following information:

- the total number of research partnerships established with support of ARF, GCP and RIDSSA was 54 (ARF 32; 19 GCP; 3 RIDSSA). Out of the 54 research partnerships, 13 had a multi-country focus;
- the total number of partnerships on educational capacity building established with support of NICHE I was 17;
- the total number of partnerships on educational capacity building established with support of NICHE II / Innocap was 22;
- the total number of partnerships established with support of Erasmus+ was 4;
- the total number of PPP's established with support of FDOV in selected countries was 18, out of which 8 partnerships had a multi-country focus.
- most partnerships were established with partners in Kenya (41), Ethiopia (30), Benin (20), Ghana (16) and Uganda (16). A few partnerships were established with Mozambique (8) and Malawi (3). In Cameroon only 1 partnership was found, in Ivory Coast 0.

The following higher education institutes in the selected countries were active / involved in these partnerships.

# Figure 1Overview of higher education institutes from selected SHAEA countries involved in<br/>partnerships / institutional cooperation with Dutch institutes / organisations

Country	Higher education institutes involved in partnerships <sup>4</sup>
Benin	University of Abomey – Calavi, University of Parakou
Cameroon	University of Dschang
Ethiopia	Addis Ababa University, Mekelle University, Jimma University, Mary's University, Arba Minch University Institute of Technology, Bahir Dar University, Samara University, Gambella University, Aksum University, Haramara University, Hawassa University
Ghana	University of Ghana, University of Energy and Natural Resources, Kwame Nkrumah University of Science and Technology, University for Development Studies
Ivory Coast	-
Kenya	University of Eldoret, Egerton University, Moi University, Pwani University, Jomo Kenyatta University of Agriculture & Technology, University of Nairobi, South Eastern Kenya University, Bondo University College Kenya, Kenyatta University, Strathmore University, Latia

4 Research institutes and TVET colleges are not included in the overview.

Mozambique	Universidade Zambeze, Eduarde Mondlane University
Malawi	Lilongwe University of Agriculture and Natural Resources
Uganda	Makerere University / College of Agricultural and Environmental Sciences, Muni University, Christian University

The following Dutch higher education institutes were active / involved in these partnerships in the selected countries:

# Figure 2 Overview of Dutch higher education institutes involved in partnerships / institutional cooperation selected countries

Country	WUR	VU	UU	UvA	DUT	VHL	Aeres	KIT	MSM	University of Twente	IHE	HAS Den Bosch
Benin	х	x										
Cameroon	х											
Ethiopia	х	х	х			х		х	х	х	х	
Ghana	х	х	х	х	Х			х				
Ivory Coast	х											
Kenya	х	х		х	х	х	х	х	Х		х	Х
Mozambique	х		х				х	х		х		
Malawi	х											
Uganda	х				х							х

In addition to the partnerships established, a total of 36 relevant NFP II Tailor made trainings (TMTs) and 4 relevant refresher courses were implemented in / for selected countries, and 28 relevant PSD Apps were used in / for selected countries.

A more qualitative analysis, providing insight in the (possible) alignment of the reviewed partnership themes with the SHAEA themes was difficult / not possible within the scope of the present inventory (as different categories are being used in programmes / instruments) - this would require an indepth, time consuming review of information on all individual partnerships. However, on the basis of the topics / names of the partnerships under review, it can be stated that most partnerships focus on one of the three following SHAEA themes: (1) Agribusiness and Entrepreneurship, (2) Agri-food systems and Nutrition and (3) Rural Innovations and Agricultural Extension. The present partnerships in these themes provide opportunities for continued or new cooperation on these SHAEA themes.

A review of OKP information has revealed that the following six OKP (full programme) countries have a specific Food and Nutrition Security (FNS) focus and align as such with the selected SHAEA countries: Benin, Ethiopia, Ghana, Kenya, Mozambique, Uganda. The Country Plans of

Implementation (CPIs) of these countries provide more detailed information on themes and eligible organisations for partnerships and cooperation under OKP. This information is presented as part of the findings per country.

# 3.2 General findings questionnaire

The findings derived from the questionnaires completed by HAS Den Bosch, ISS, Wageningen University/Centre for Development Innovation (WU/CDI), Van Hall University of Applied Sciences (VHL), Aeres Group<sup>5</sup>, African Studies Centre, Leiden University (ASC, UL) and Amsterdam Centre for World Food Studies and The Centre for International Cooperation, Vrije Universiteit Amsterdam (ACWFS/ CIS-VU) provide a representation of the most relevant partnerships and cooperation in the selected countries and in the SHAEA themes.

# Overview of past and present partnerships

- All 7 institutions that participated in the inventory have / are engaged institutional cooperation or partnerships in one of more of the SHAEA countries, and 6 thereof have/are engaged in agricultural institutional education and/or research cooperation/partnerships that is relevant to and falls under one or more of the SHAEA themes<sup>6</sup>.
- SHAEA themed partnerships are found in all 9 countries.
- Ethiopia and Kenya represent the highest number of active partnerships with Dutch institutions, Ivory Coast, Cameroon, Malawi the lowest.
- The main theme addressed in partnerships is: Agribusiness and entrepreneurship.
- The least addressed theme is: Agricultural risk management and climate change proofing For a full overview of the countries and themes by institution see the annexes.

A total of 48 partnerships were presented in the questionnaires. These are examples of established partnerships deemed relevant to the inventory by the institutions.

The questionnaires also revealed some insights into the interests of Dutch education and research institutes in future cooperation in the designated countries, and in the SHAEA themes.

- All 7 institutions have expressed interest in future partnerships and collaboration in activities related to the SHAEA themes.
- Potential is seen for SHAEA related initiatives in all 9 countries; and in almost all SHAEA themes.

<sup>5</sup> The responses received from: Aeres, Aeres University of Applied Sciences and Aeres MBO Barneveld have been compiled and are presented in this report under the name/title: Aeres Group

<sup>6</sup> ASC Leiden is/has been engaged in (research) partnerships in Ghana, Ethiopia, Kenya, Uganda, Malawi and Cameroon. ASC is primarily interested in cultural, socio-political and political economy aspects of societies in Africa. Research is primarily clustered around these themes.

 Other themes provided by VHL, ISS and HAS: Natural Resource Management/ Climate Change/ Land grab/ Land rights reform (and curriculum development and strengthening of agricultural education).

Feedback from the Dutch institutions has revealed that all 7 are active and have experience in SHAEA themed activities. Potential is seen for future collaboration in all SHAEA themed initiatives, and institutions are open to exploring opportunities in countries where they are not currently active; such as Cameroon (ACWFS &CIS-VU, Aeres Group), Malawi (ACWFS &CIS-VU, Aeres Group) and Benin (HAS Den Bosch).

# **Regional partnerships**

Several of the examples provided in the country findings fall under regional (research partnerships/ programmes. Examples hereof are from WUR/CDI, and VU:

# WUR/CDI

- Organisational Structures for SMAllholder Resilience (OSMARE) (Malawi, Mozambique)
- Convergence of Sciences Strengthening Agricultural Innovation Systems (CoS-SIS)- (Ghana, Benin and Mali)
- Environmental Virtual Observatories for Connective Action (EVOCA)- (Ghana, Ethiopia and Kenya)
- Enhancing reliable access to quality seed in Africa/ Integrated Seed Sector Development programme (ISSD) – (Kenya/ Africa wide)

### VU

- African Economic Research Consortium (AERC)
- Natural Resource Management and Conflict Resolution for Stability and Inclusive Growth in the Greater Virunga Landscape (3 C project)

# 4. Findings per country

# 4.1 Findings Benin

### Overview of partnerships

- The desk study has revealed a total of 20 partnerships involving cooperation with Benin.
- Out of these 20, 12 focused on research cooperation 3 with support from GCP and 9 from ARF.
   One partnership had a multi-country focus. The research cooperation involved the following institutions in Benin: Hortitechs Développement, University of Abomey Calavi, Group Pepite d'Or, Agence Béninoise de Sécurité Sanitaire des Aliments, DEDRAS, Laboratoire de Recherches et de Développement en Economie Sociale (LARDES), Institut National de Recherche Agricoles

du Bénin (INRAB), Centre d'Actions pour l'Environnement et le Développement Durable, the Hunger project Benin, Groupe Magnificat, Allotcheou Fruit beverage company, Association for the Development of Soybean (SOJAGNON-NGO) International Institute of Tropical Agriculture (IITA-Benin), Biodiversity International Benin, Benin Agribusiness Incubation Hub – Sarl, Sustainable Agriculture Development Network (REDAD), LEMAN SARL, Centre Régional pour le Développement Rural Atacora – Donga, GERME NGO, Cite des Bananes, Rural Support and Research Group. The following institutions in the Netherlands were involved: WUR, Centre for World Food Studies/ VU, Woord en Daad.

- In addition, 4 partnerships aimed at educational capacity building were established Under NICHE I, for Agriculture/Food and Nutrition Security themed initiatives. Local partners involved were: Ecole Nationale Superieure des Sciences et Techniques Agronomigues de Djougou et de Kétou, and the Universities of D'Abomey-Calavi and Parakou. From the Netherlands, CINOP, ICRA, Aeres Group, SNV, KIT and WUR were involved.
- Under NICHE II / Innocap, 2 educational capacity building partnerships were established:
  - Strengthening production systems to optimize agricultural production and reinforce food security, in a context of climate change in the North of Benin;

Meeting high vegetable demand in water-scarce Atacora-Donga region of Benin.
 The cooperation involved amongst others the University of Parakou in Benin, the University of Ouagadougou in Burkina Faso, Centre de Promotion de l'Entrepreneuriat Agricole Féminin (CePEA Sourou), the Union Régionale des Coopératives de Maraichers de lÁtacora-Donga.
 From the Netherlands, ICRA and CINOP Global were participating.

- With support of the Erasmus+ programme, 1 partnership on mobility / staff / student exchange was established - between University of Abomey - Calavi and the VU.
- Only 1 PPP on entrepreneurship development and food security was established with FDOV support, named "Cracking the nut". The project aims at realizing an inclusive and competitive cashew sector in Benin and Burkina Faso.
- No relevant TMTs or refresher courses were implemented under NFP involving Benin.
- Two relevant PSD Apps were used in Benin. They focused on exchanging knowledge on postharvest food losses and the facilitation of trade relations between Benin and Nigeria.

### Characteristics of partnerships

- The questionnaire provides some insights in the characteristics of the partnerships. Four Dutch
  institutions indicated to be involved in partnerships in Benin: ACWFS & CIS-VU, Vrije Universiteit
  Amsterdam; Aeres, ISS/ Erasmus University Amsterdam and WUR / CDI. A total of 7 examples
  were described. The partnerships involve capacity building and educational cooperation.

SHAEA themes addressed in partnerships and cooperation were: Agribusiness and entrepreneurship; Agri-Food Systems and Nutrition; Rural Innovations and Agricultural Extension; Agricultural Policy Analysis.

### Possible alignment with OKP

At the time of the finalisation of this report (October 2018), the CPI for Benin was not published yet.

# 4.2 Findings Cameroon

# Overview of partnerships

- The desk study has revealed no partnerships involving cooperation with Cameroon. It should be noted that Cameroon was not eligible for NICHE support. No relevant TMTs or refresher courses involving Cameroon were implemented under NFP. No PPPs were established in Cameroon with FDOV support and no relevant PSD Apps were used.
- In the questionnaire, however, WUR/CDI indicated that they had SHAEA themed activities in Cameroon, but no examples of the partnership(s) or themes have been provided by WUR/CDI.

# Possible alignment with OKP

• Not applicable - country not participating in OKP.

# 4.3 Findings Ethiopia

### Overview of partnerships

- The desk study has revealed a total of 30 partnerships involving cooperation with Ethiopia.
- Out of these, 10 focussed on research cooperation 7 with support from GCP, 2 from ARF and 1 from RIDSSA. A total of 5 partnerships had a multi-country focus. The research cooperation involved the following institutions in Ethiopia: Addis Ababa University, Mekelle University, Jimma University, Mary's University, Tigray Agricultural Research Institute, PELUM, Ethiopian Institute of Agricultural Research, Agricultural Research Institute, World Vision Ethiopia, Ethiopian Society of Animal Production (ESAP), Ministry of Livestock and Fishery, AgriProFocus Ethiopia, Relief Society of Tigray, Nyala Insurance. From the Netherlands, WUR, Utrecht University, VHL, Dutch Farm Experience, Fair and Sustainable Advisory Services, KIT were participating.
- A total of 4 partnerships aimed at educational capacity building were established with support of NICHE I, for Agriculture/Food and Nutrition Security themed initiatives. Local partners involved were: Agarfa A-TVET, Ardaita, Holeta and Mizan Agricultural Technical Vocational and Educational Training Colleges. Examples of partners from the Netherlands, include: Q-Point B.V., Aeres Group, VHL, KIT and MDF, HAS and CINOP.
- Under NICHE II / Innocap, 6 partnerships on capacity building in education in the area of FNS were established. Examples of these partnerships are:
  - Ethiopian Education Network to Support Agricultural Transformation;
  - Executive MBA in agri-business;

• Capacity Development of HEIs in Small-scale Irrigation.

These partnerships involved amongst others Bahir Dar University, Jimma University and Arba Minch University Institute of Technology in Ethiopia, and University of Twente, Maastricht School of Management and UNESCO-IHE.

- With support of the Erasmus+ programme, 1 partnership on mobility / staff / student exchange was established between University of Addis Ababa and the Vrije Universiteit Amsterdam.
- A total of 9 relevant PPPs were established with support of FDOV. Examples of the PPPS are (named):
  - Cooperation on appropriate solutions for mechanisation of agriculture in Ethiopia;
  - Food security through improved resilience of small-scale farmers in Ethiopia and Kenya;
  - Potato Processing in Ethiopia;
  - The Amsterdam Initiative against Malnutrition.

The PPPs involved amongst others the Oromia Agricultural Research Institute, Senselet Food Processing PLC and SolarGrow PLC from Ethiopia, and WUR, Stichting DLO and Alterra, Veris Investments BV from the Netherlands.

- In addition, a total of 12 relevant tailormade trainings in the field of FNS were implemented with NFP support in Ethiopia. Examples of the trainings implemented were:
  - 'University staff training on crop cultivation and water management under semi-arid conditions', for Samara University;
  - Strengthening capacity for agro value chain development', for Gambella University;
  - 'Food security and inclusive value chain development', for Aksum University, Shire Campus / College of Agriculture;
  - 'Building a profitable dairy industry through enhanced practical capabilities', for Alage Agricultural TVET College.
- A total of 5 relevant PSD Apps were used. They involved amongst others capacity development in the area of poultry and horticulture, a trade mission, and a scoping study in relation to agroindustry parks.

# Characteristics of partnerships

- The questionnaire provides some insights in the characteristics of the partnerships. Six Dutch
  institutions indicated to be involved in partnerships in Ethiopia: ACWFS & CIS-VU, Vrije Universiteit
  Amsterdam, Aeres, Has University of Applied Sciences, ISS / Erasmus University Rotterdam, Van
  Hall Larenstein, WUR / CDI (13 examples). Key characteristics can be summarized as follows. The
  partnerships involve research and educational cooperation and capacity building.
- Local partners include: Mizan A-TVET, Hawassa University, Addis Ababa University, Association of All Ethiopian Trained in The Netherlands Higher Learning Institutions, Jimma University, Alage ATVET College and Ethiopian Poultry Producers organisation (EPPA). Other partners/ members of consortia mentioned: Aeres University of Applied Sciences, Nordwin College, ICRA, MSM, Passion Agro & Furniture Production PLC in Debre Zeit; Ministry of Agriculture Ethiopia, Makerere University, Ethiopian Institute of Agricultural research and Holland Africa Poultry Partners (HAPP).

- SHAEA themes addressed in partnerships and cooperation: Agribusiness and Entrepreneurship, Agri-food Systems and Nutrition, Rural Innovations and Agricultural Extension, and Agricultural Policy Analysis.
- Themes listed under 'Other': Wildlife conservation and utilisation and Natural Resource Management, Poultry Dairy Education

# Capacity building for scaling up of evidence-based best practices in agricultural production in Ethiopia – CASCAPE

CASCAPE was initiated to strengthen the capacity of stakeholders on scaling up of best practices and newly introduce practices for agricultural production. In addition, CASCAPE is to provide an evidence base for best practices. Moreover, the CASCAPE approach aimed at improving linkages between farmers, NGO's, private sector, universities, research institutes and policy makers.

The objective of CASCAPE was to support the Ethiopian Government to increase agricultural productivity in a sustainable way in order to enhance agricultural growth and to achieve food security.

The project ran from 2012 until 2015 and involved partnerships between Wageningen University/CDI, several universities in Ethiopia, including: Jimma University, Hawassa University and Mekele University.

SHAEA theme: Agricultural policy analysis

Key focus and orientation of the cooperation: research cooperation

https://www.wur.nl/nl/show/CASCAPE.htm

#### Possible alignment with OKP

- In Ethiopia, the OKP will focus mainly on FNS, with an emphasis on dairy, horticulture and water. While there is enormous potential for agricultural growth in Ethiopia, small holder farmers who contribute to 95 percent of the agricultural GDP are challenged by an ineffective and inefficient agricultural marketing system, underdeveloped transport and communications networks, underdeveloped production technologies, environmental degradation, and lack of participation in decisions related to their livelihoods.
- Building capacity and skills should not only be concentrated in crop production and plant health services, but in all horticulture value chain actors and is essential to the strengthening of the sector. Furthermore, the improvement of the horticulture education system should be a key issue in Ethiopia to produce better skilled professionals and to achieve a compatible position in the international market. This includes curriculum improvement and an update of basic infrastructures to facilitate practical lessons and training activities.
- The CPI proposes the following interventions to improve the quality and employability of ATVET graduates related to dairy and horticulture: strengthening the capabilities of TVET teachers in necessary (practical) skills for agricultural production and processing (integrated approach); improving the development and dissemination of (new) technologies to increase sustainable agricultural production; and developing and strengthening linkages between ATVETs, and stakeholders: such as universities, the private sector, farmers and suppliers.
- Possible opportunities for synergy between OKP and SHAEA relate to SHAEA gap areas: Agribusiness and Entrepreneurship, Agri-food Systems and Nutrition, and Rural Innovations and Agricultural Extension, while interventions can be linked to the SHAEA project component:

Strengthening Regional Anchor Universities in Key Gap areas (fostering outreach to agricultural sector stakeholders), Capacity building support through regional interventions and Project facilitation, coordination and management.

 For further information on the implementation of OKP in Ethiopia, please refer to the <u>Country</u> <u>Plan of Implementation</u>

# 4.4 Findings Ghana

- The desk study has revealed a total of 16 partnerships involving cooperation with Ghana.
- Out of these, 12 focussed on research cooperation with Ghana 6 were supported by GCP, 5 by ARF and 1 by RIDSSA. And 4 partnerships had a multi-country focus. The research cooperation involved the following institutions from Ghana: University of Ghana, University of Energy and Natural Resources, Kwame Nkrumah University of Science and Technology, Rural Development and Youth Association (RUDEYA), International Institute for Tropical Agriculture, Cacao Research Institute, Ministry of Food and Agriculture, Ga West Municipal Assembly, Ghana Agricultural Associations Business and Information Centre (GAABIC), International Fertilizer Centre – Ghana, Sustenance Agro Ventures, Eucharia Farms Ltd, Farmerline, Resource Management Support Centre / Forestry Commission, Safi Sana Ltd, Agri – Impact Ltd, Premium Vegetables Co Ltd, Solidaridad Ghana, Urban Jungle Agro Ind. Ltd, SNV Ghana.

The following institutes from the Netherlands were involved: Delft University of Technology, ICRA, Ujuizi Laboratories, University of Amsterdam, MDF Training and Consultancies, Institute of Social Science Research, KIT, Utrecht University, Fair and Sustainable Advisory Services.

- A total of 2 partnerships on capacity building in education in the area of FNS were established with support of NICHE II / Innocap. These partnerships focused on:
  - Strengthening the capacity of four colleges of Agriculture;
    - Innovative Research for Food Security.

The partnerships involved amongst others Ministry of Food and Agriculture and Kwame Nkrumah University of Science and Technology in Ghana; MDF and CINOP Global in the Netherlands.

- There were no partnerships on mobility / staff / student exchange established in Ghana with support of the Erasmus+ programme.
- A total of 2 PPPs on entrepreneurship development and food security were established with support of FDOV. These were (named):
  - The Sustainable Maize Programme North Ghana (see box 1);
  - Strengthening the horticulture export sector in Ghana.

#### Example of a PPP on entrepreneurship development and food security in Ghana, supported by FDOV

The Sustainable Maize Programme North Ghana aims to upscale a successful pilot maize programme in the North of Ghana. With this project the agricultural 'start-up' cooperative Masara N'Arziki wants to achieve economy of scale and financial sustainability and to introduce environmentally sustainable farming practices. The PPP consists of the project applicant West Africa Fair Fruit (WAFF), teaming up with the farmer association Masara N' Arziki, the private agricultural company Wienco Ghana Ltd, the Ghana's agricultural research institute SARI and one Dutch NGO, Solidaridad NL.

The goal is to increase the quantity and quality of sustainable maize production in the Northern regions of Ghana by strengthening the farmers' cooperative Masara and through this providing capacity building on maize farming, conservation farming, and post-harvest losses. The project wants to engage 12,000 additional farmers in the North of Ghana lifting the production of maize at Masara from less than 28,000 tons to 96,000 tons. Implementing partners are: Netherlands Enterprise Agency, West Africa Fair Fruit, Ghana, Wienco (Ghana) Ltd, Ghana, Solidaridad, Masara N'Arziki Farmers Association, Ghana, Savanna Agriculture Research Institute, Ghana. The budget amounts to 2 million.

- In addition, a total of 5 relevant tailormade trainings in the field of FNS were implemented with NFP support in Ghana. Examples of the trainings implemented were:
  - Fostering Scientific Entrepreneurship: enabling science and technology transfer to the agri-food sector, for the Council for Scientific and Industrial Research, Food Research Institute (CSIR-FRI);
  - ICT for rural development in support of food and water, for the University for Development Studies;
  - Enhancing Technology-Driven Entrepreneurship in WASH and Agriculture, for Kwame Nkrumah University of Science & Technology.
- A total of 4 relevant PSD Apps were used for Ghana. They involved amongst other studies on horticulture, sea-freight possibilities for pineapple export and a mission on food processing technologies and packaging.

### Characteristics of partnerships

- The questionnaire provides some insights in the characteristics of the partnerships. Six Dutch
  institutions indicated to be involved in partnerships in Ghana: ACWFS & CIS-VU, Vrije Universiteit
  Amsterdam, Aeres, Has University of Applied Sciences, ISS / Erasmus University Rotterdam, Van
  Hall Larenstein, WUR / CDI (six examples). Types of partnerships involve: research and education
  cooperation, but mainly capacity building.
- Local partners include: University of Ghana, VOA Lys Farms, Netherlands Alumni Association of Ghana and Centre for the Modernisation of Forestry Operations. Other partners/ members of consortia mentioned: PUM, IOB, Form international.
- SHAEA themes addressed in partnerships and cooperation were: Agribusiness and Entrepreneurship; Agri-food Systems and Nutrition; Rural Innovations and Agricultural Extension; and Agricultural Policy Analysis and Statistical Analysis; Foresight and Data Management. Themes listed under 'Other': Natural Resource Management, Climate Change.

#### Autonomy, partnership and beyond. A counterfactual analysis of policy coherence- Ghana

The Centre for World Food Studies at VU University Amsterdam (SOW-VU) partnered with IOB and a team of researchers from the University of Ghana to develop a methodology for assessing coherence options for Dutch and European aid. In close collaboration with IOB, the team constructed several counterfactual scenarios, combining quantitative data with qualitative insights within a modelling approach. This enabled them to analyse the options for of different donor policies (such as on trade, tax policies and migration) and reactions by the Government of Ghana in a single framework.

SHAEA themes: Agri-Food Systems and Nutrition, Agricultural Policy Analysis and Statistical Analysis, Foresight and Data Management

- Key focus and orientation of the cooperation: research cooperation in economic multi-sector economywide models.
- <u>https://www.government.nl/documents/reports/2014/07/24/iob-autonomy-partnership-and-beyond-a-counterfactual-analysis-of-policy-coherence-for-ghana</u>

#### Possible alignment with OKP

- In Ghana, OKP will focus on the themes (1) Food and Nutrition Security and (2) Water Management for Agricultural Production, with a focus on entrepreneurship and private sector development. The CPI identifies education and training gaps in the Agricultural Technical and Vocational Training and Education (ATVET) system, referring to issues of (youth) employability in the Ghanaian labour market.
- OKP interventions in Ghana will focus on strengthening the ATVET institutions on the one hand, and on improving the ATVET system and structure on the other hand. It aims to strengthen the links between farm schools, agricultural colleges and universities and other tertiary education institutions within the agriculture sector. Establishing a strong culture of collaboration and partnerships between higher education institutions is viewed as key to enhancing the skills of graduates and employment in agribusiness and addressing education and training gaps.
- These OKP focus areas clearly relate to the SHAEA gap areas: Agribusiness and Entrepreneurship, Rural innovations and Agricultural Extension. They also tie in with three SHAEA project components/interventions: strengthening regional anchor universities in key gap areas; capacity-building support through regional interventions and project facilitation, coordination and management.
- For further information on the implementation of the OKP in Ghana, please refer to the <u>Country</u> <u>Plan of Implementation.</u>

# 4.5 Findings Ivory Coast

## Overview of partnerships

- The desk study revealed 1 partnership involving cooperation with Ivory Coast. This (multi-country) research cooperation (Ghana and Ivory Coast) was supported by GCP. The partnership also involved WUR, which also was the only institution that indicated to have SHAEA themed activities in Ivory Coast (but no examples were provided).
- It should be noted that Ivory Coast was not eligible for NICHE support. No relevant TMTs or refresher courses were implemented under NFP, and no PPPs were established in Ivory Coast with FDOV support.
- A total of 4 relevant PSD Apps were used for Ivory Coast. They involved amongst other capacity building for the Ghana Standards Authority and Conseil du Café – Cacao and Cote d'Ivoire Normalisation (CODINORM); a sector study on horticulture; a knowledge exchange mission to the Netherlands, involving WUR.

# Characteristics of partnerships

• WUR/CDI has not provided information on the partnership with Ivory Coast, but the following information on the research cooperation was derived from the desk study.

### Example of research partnership on cocoa crop improvement in West Africa, supported by GCP

Cocoa crop improvement, farms and markets: a science-based approach to sustainably improving farmer food security in Ghana and Ivory Coast. Cocoa farmers in West Africa face poor productivity due to constraints at the crop, field, farm and sector level. To ensure farmers' livelihoods, yields need to increase sustainably. This research will investigate the effect of field level practices on cocoa productivity. The suitability of different (combinations of) practices for different smallholder farm systems will be explored. Effective delivery of the services supporting these practices will be co-developed with public and private partners.

Partners are: Wageningen University and Research (WUR), department of Plant Production Systems (The Netherlands), International Institute for Tropical Agriculture (IITA, Ghana), Centre National de Recherche Agronomique (CNRA, Ivory Coast), Mondelez International (UK), WUR department of Crop Systems Analysis, WUR department of Knowledge Technology and Innovation.

### Possible alignment with OKP

• Not applicable - country not participating in OKP.

# 4.6 Findings Kenya

#### Overview of partnerships

- The desk study revealed a total of 41 partnerships involving cooperation with Kenya.
- Out of these, 16 focussed on research cooperation 10 were supported by GCP, 5 by ARF, 1 by RIDSSA. A total of 8 partnerships had a multi-country focus. The research cooperation involved the following institutions from Kenya: University of Nairobi, University of Eldoret, Kenyatta University, Egerton University, Association of African Business Schools (AABS), South Eastern Kenya University, Mt. Clara Mtakatifu Mwangaza, Mace Foods Kenya, KENRIK Centre for Biodiversity, Centre for African Bio-Entrepreneurship, International Fertilizer Development Centre - Kenya, Victoria Institute for Research on Environment and Development, Koppert Biological Systems, Rise Against Poverty Worldwide - Kenya, International Institute of Tropical Agriculture, Eastern Africa Grain Council, International Centre for Insect Physiology and Ecology, Ministry of Agriculture / State Department of Livestock, African Centre for Technology Studies, Sanergy, Kenya Agriculture and Livestock Research Organisation, Partnership for Economic Policy, Fresh Produce and Exporters Association of Kenya, Technoserve, Solidaridad Kenya, AgriProFocus Kenya. From the Netherlands Koppert BV, WUR, ICRA, MetaMeta Group, VU / Amsterdam Centre for World Food Studies, University of Amsterdam, Utrecht University, Fair and Sustainable Advisory Services, KIT, Netherlands Agro, Food and Technology Centre, BodemBergsma, Agriterra, Royal Friesland Campina were involved.
- With support of NICHE I, 5 educational capacity building partnerships were established in Kenya for Agriculture/Food and Nutrition Security themed initiatives. Local partners involved were: Bukura Agricultural College, Egerton College, Horticultural Practical Training Centre Kenya, South Astern Kenya University. Examples of partners from the Netherlands, include: Q-Point B.V, WUR, KIT. Aeres Group, SNV, Delphy and Radboud University Nijmegen.
- In addition, a total of 10 partnerships on capacity building in education were established with support of NICHE II / Innocap. Examples of these partnerships were:
  - Building Stronger Capacities to link Spatial Planning to Agribusiness and Public Policy Development in Greater Western Kenya
  - Capacity building for improved linkages between the private sector and universities and TVETs in Kenya;
  - Innovative ways of learning, demonstration farming and water management for enhanced food security and income generation in coastal regions;
  - o Capacity Building for Strengthening the Livestock Value Chain;
  - Enhancing the Capacity of Kenya School of Agriculture for improved practical and labour market oriented agricultural TVET education.

These partnerships involved amongst others the University of Eldoret, Maseno University, Egerton University, Pwani University, Baraka Agricultural College, Kenya School of Agriculture form Kenya; from the Netherlands amongst others WUR, Aeres Group, MSM, KIT, VU, CINOP and Q-Point.

 With support of the Erasmus+ programme, 2 partnerships on mobility / staff / student exchange were established on Food Nutrition Security - between Moi University and VU, and Maseno University and VU.

- In Kenya a total of 8 PPPs on entrepreneurship development and food security were established with support of FDOV (out of which four with a multi-country focus). Examples are:
  - o Amsterdam Initiative Against Malnutrition;
  - Providing analytical services for informed farming in Kenya;
  - o Dutch Dairy Impact Nairobi;
  - Food for all project;
  - Food security through improved resilience of small-scale farmers in Ethiopia and Kenya.

Institutions from Kenya involved in the PPP's were amongst others Centrofood Industries Ltd Kenya & SNV Kenya & Kenya Nutritionists and Dietrians Institute & Nursing Council of Kenya & Philips Health Service Lmt Kenya & Kenya National Federation of Agricultural Producers & Ministry of Public Health and Sanitation Kenya, Bondo University Kenya, Coffee Management Service Ltd, Kenya, Solidaridad Eastern and Central Africa Expertise Center, Kenya, C. Dorman Ltd, Kenya, Sustainable Management Service Limited, Kenya, Coffee Research Foundation, Kenya. From the Netherlands, RVO& Friesland Campina Kievit BV & Amref Flying Doctors & BoP Innovation Centre & Rijk Zwaan Zaadteelt en Zaadhandel BV & ICCO & WUR & Koningklijke DSM NV & Unilever Nederland Holdings BV & Stichting DLO & Dutch Agricultural Development and Trading Company & Akzo Nobel Chemicals BV were amongst others participating.

- A total of 6 relevant TMTs were implemented in / for Kenya and 4 relevant refresher courses.
   Examples were:
  - A TMT on advanced greenhouse and open field crop management for smallholder farmers, for Royal Seed Kenya.
  - A refresher course on 'Strengthening the role of institutions in the commercialization of agricultural value chains in Africa, through capacity building of VHL alumni', involving Egerton University and Hogeschool Van Hall Larenstein;
  - A refresher course on 'Sustainable Intensification of Agriculture for Food Security', involving Jomo Kenyatta University of Agriculture & Technology (JKUAT) and IHE Delft;
- A total of 7 PSD Apps were used for Kenya. The Apps included capacity building in relation to a horticulture (Horticulture Centre of Excellence) and dairy (Dairy Agricultural Institutes, Colleges, Universities); seminars, missions and conferences on specific topics.

### Characteristics of partnerships

- The questionnaire has revealed some insights in the characteristics of the partnerships. Six Dutch
  institutions indicated to be involved in partnerships in Kenya: ACWFS & CIS-VU, Vrije Universiteit
  Amsterdam, Aeres, HAS University of Applied Sciences, ISS / Erasmus University Rotterdam, Van
  Hall Larenstein, WUR / CDI (13 examples). The partnerships involve: research and education
  cooperation and capacity building.
- Local partners include: VEGPRO Group, University of Nairobi, African Economic Research Consortium (AERC), Egerton University, Kenya School of Agriculture, Baraka Agricultural College, Maseno University, Moi University, Temeo Institute of Agricultural Policy and Development. Other partners/ members of consortia mentioned: Cinop, SNV, Aeres Dairy training centre, RVO, DASUDA and TNO and Future Agricultures Consortium (FAC).

 SHAEA themes addressed in partnerships and cooperation: Agribusiness and Entrepreneurship; Agri-food Systems and Nutrition, Rural Innovations and Agricultural Extension; Agricultural Risk Management and Climate Change Proofing; Agricultural Policy Analysis; and Statistical Analysis, Foresight and Data Management. Themes listed under 'Other': Natural Resource Management, Climate Change, Poultry Dairy Education.

#### Flying Food – Kenya and Uganda

The project aspires to increase availability of tasty and nutritious food for low-income consumers in Africa. This large group often has a shortage on proteins, vitamins and minerals. Eating insects such as crickets provides a solution! The Flying Food project is based on a consortium between Kenyan, Ugandan and Dutch partners. It sets up a new value chain from rearing to processing, marketing and eating of crickets.

HAS University partnered with TNO on this project from 2012-2017. The key focus of the cooperation was product, marketing and value chain development in insect breeding. SHAEA themes: Agribusiness and Entrepreneurship, Agri-food Systems and Nutrition and Rural Innovations and Agricultural Extension

https://www.flyingfoodproject.com/

#### Possible alignment with OKP

- In Kenya, OKP will concentrate on interventions related to FNS and Water which focus on agriculture-related water management and water use. The CPI identifies the following main causals for food nutrition insecurity in Kenya: inefficient production, post-harvest loss, lack of food safety and low participation of youth in agriculture. These are inextricably linked to issues of water scarcity, and poor governance of water which restrict agricultural practices.
- The CPI proposes addressing capacity gaps in water-smart and climate-smart agriculture through the following possible interventions: improving the TVET education system at Polytechnic and Vocational College level (i.e. practical training for agricultural TVET teachers); strengthening collaboration between TVET providers and Kenyan universities and through providing fellowships and training in water-smart agriculture/sustainable water use and -governance.
- Possible opportunities for synergy relate to SHAEA gap areas: Agribusiness and Entrepreneurship, Agri-food Systems and Nutrition, Agricultural Risk Management and Climate Change Proofing, and Agricultural Policy Analysis. Interventions can be linked to the SHAEA project component: Strengthening regional anchor universities in key gap areas: strengthening institutional leadership and management capabilities, and fostering outreach to agricultural sector stakeholders.
- For OKP a key focus will be to support SHAEA initiatives in the quality development of professional education and vocational training through input of new knowledge and innovations relevant for agri-business development, extension services and agricultural skills training.
- For further information on the implementation of OKP in Kenya, please refer to the <u>Country Plan</u> of Implementation.

# 4.7 Findings Malawi

# Overview of partnerships

- The desk study has revealed a total of 3 partnerships involving cooperation with Malawi.
- Out of these, one focussed on research cooperation. This (multi-country) cooperation (Malawi, Mozambique, Tanzania, Zambia and Zimbabwe) was supported by GCP and involved the following institutions from Malawi: Lilongwe University of Agriculture and Natural Resources and VUNA. From the Netherlands WUR was involved.
- Malawi was not eligible for NICHE support therefore no educational capacity building partnerships were established under this programme. No relevant TMTs or refresher courses involving Malawi were implemented under NFP.
- A total of 2 relevant PPPs were established with support of FDOV. These partnerships were (named): "Going Nuts" and "Macadamia Value Chain Enhancement". The partnerships involved the following companies from Malawi: Dapp Malawi, Afri-Oil Seeds Limited, Sable Farming Company Limited. From the Netherlands the following countries were participating: RVO, Intersnack Procurement BV, Stichting Sympany+, Intersnack Procurement BV.
- Only 1 relevant PSD App was used for Malawi involving matchmaking in food and grains.

# Characteristics of partnerships

The questionnaire has revealed some insights in the characteristics of the partnerships. Two Dutch institutions indicated to be involved in partnerships in Malawi: ACWFS & CIS-VU, Vrije Universiteit Amsterdam and ASC Leiden. One example was provided by WUR/CDI, the "Organisational Structures for SMAllholder Resilience (OSMARE) programme. It is a research programme funded by NWO-WOTRO. The SHAEA theme addressed in this partnership and cooperation is Agribusiness and Entrepreneurship.

### Possible alignment with OKP

• Not applicable - country is not participating in OKP.

# 4.8 Findings Mozambique

### Overview of partnerships

- The desk study revealed a total of 8 partnerships involving cooperation with Mozambique
- Out of these, 3 focussed on research 1 was supported by GCP and 2 by ARF. One partnership had a multi-country focus. The research partnerships focused on the following:
  - Bridging the gap between policy and practice on land governance, inclusive business and food-security;
  - Understanding and scaling organizational structures for smallholder's resilience in Malawi, Mozambique, Tanzania, Zambia and Zimbabwe;
  - $\circ$   $\;$  Unravelling the potential of farmer led irrigation development.

The research cooperation involved the following institutions from Mozambique: Action Aid Mozambique, Instituto Superior Politecnico de Manica, Resiliencia Mocambique Lda. From the Netherlands WUR, Utrecht University/International Development Studies Group, Action Aid Netherlands, Resilience BV were involved.

- Under NICHE I, 3 educational capacity building partnerships were established in Mozambique for Agriculture/Food and Nutrition Security themed initiatives. Local partners involved were: Instituto Superior Politecnico de Gaza, Instituto Superior Politecnico de Manica and Universidada Eduardo Mondlane. Examples of partners from the Netherlands, include: Q-Point B.V, KIT, Van Hall Larenstein and CBE Group.
- One partnership on capacity building in education was established with support of NICHE II. This
  focused on "Improved capacity for affordable quality seed production and utilization in the
  Zambeze Valley ". The partnership involved cooperation between ADVZ Tete Office (head
  office), Aeres Group, WUR, KIT, Agrarian Institute Chimoio, the Agrarian Institute Mocuba, the
  Agrarian Professional School Caia, the Agrarian School Chidzolomondo, Faculty Agrarian
  Sciences / Unizambeze, Faculty Agro and Forest-Engineering.
- No partnerships on mobility / staff / student exchange were established under the Erasmus+ programme.
- In Mozambique, 1 relevant PPP was established with FDOV support: The Southern African Partnership for Sustainable Cotton and Food. It involved cooperation between Mozambique Institute for Cotton, Fonpa, OLAM International Ltd Mozambique, Solidaridad Network SA, the Trust & Cotton Board of Zambia, RVO and Solidaridad NL.
- A total of 4 relevant TMTs were implemented with NFP II support.
- One PSD App was used for Mozambique focussing on capacity development in the National Directorate of Land (DINAT), Ministry of Land, Environment and Rural Development Mozambique. It was implemented in cooperation with Kadaster International.

### Characteristics of partnerships

- The questionnaire has revealed some insights in the characteristics of the partnerships. Three
  Dutch institutions indicated to be involved in partnerships in Mozambique: ACWFS & CIS-VU, Vrije
  Universiteit Amsterdam, Aeres and WUR / CDI (three examples). The partnerships involved
  research cooperation and capacity building.
- Local partners include: ADVZ, DDEF-MEF, Ministério da Economia e Finanças, República de Mozambique, MASA, Ministério da Agricultura e Segurança Alimentar INE, Instituto Nacional de Estatistica UEM, Universidade Eduardo Mondlane. Other partners/members of consortia: KIT, WUR/CDI.
- SHAEA themes addressed in partnerships and cooperation: Agribusiness and Entrepreneurship; Agri-food Systems and Nutrition; Rural Innovations and Agricultural Extension; Agricultural Policy Analysis; and Statistical Analysis, Foresight and Data Management.

### Possible alignment with OKP

 In Mozambique, OKP FNS interventions will focus on a comprehensive approach to nutrition. Initiatives aim to contribute towards eliminating root causes of malnutrition in the country. An integrated and inclusive approach to nutrition security is proposed, one that goes beyond sole food production, but also takes health, economic and socio-cultural factors into consideration.

- The CPI defines the following gap areas: discrepancies between existing curricula (theory) and practice, and the need for higher-level coordination and collaboration among institutions within the agricultural sector (homogenisation of curricula).
- Proposed OKP interventions aim to enhance skills and create employment opportunities and include: provision of institutional capacity building and hands-on training of technicians, the strengthening of TVET capacity and stimulating the modernisation of the agricultural sector through knowledge transfer in underdeveloped sectors.
- Possible opportunities for synergy between OKP and SHAEA relate to SHAEA gap areas: Agribusiness and Entrepreneurship, Agri-food Systems and Nutrition, Rural Innovations and Agricultural Extension and Agricultural Risk Management and Climate Change Proofing, and can be linked to all three SHAEA project components/interventions: (1) strengthening regional anchor universities in key gap areas; (2) capacity-building support through regional interventions and (3) project facilitation, coordination and management.
- For further information on the implementation of OKP in Mozambique, please refer to the <u>Country Plan of Implementation</u>

# 4.9 Findings Uganda

### Overview of partnerships

- The desk study revealed a total of 16 partnerships involving cooperation with Uganda.
- Out of these 12 focussed on research cooperation 2 were supported by GCP and 10 by ARF.
   One partnership had a multi-country focus. Examples of research themes were:
  - Stabilizing sesame yields and production in the Lango region;
  - Strengthening agribusiness ethics, quality standards and ICT usage in Uganda's value chains;
  - Promoting climate resilient seed varieties: small holder barriers to adoption and willingness to pay for seed of drought tolerant maize varieties in Uganda.

The research partnerships involved the following institutions from Uganda: RUFORUM Uganda, National Crops Resources Research Institute, College of Agricultural and Environmental Sciences of Makerere University, College of Computing and Information Sciences of Makerere University, Makerere University Business School, North East Chilli Producers Association LTD, the National Forestry Resource Research Institute, National Crops Resources Research Centre, Family Diet Ltd, Africa 2000 Network, Oxfam Uganda, Agency for Sustainable Rural Transformation, ZOA Uganda, Value Addition Institute, Solidaridad / SECAEC, Women of Uganda Network, Nutrition Solutions (FONUS) Ltd, Africa Innovation Institute, National Semi-Arid Agricultural Research Institute, National Agricultural Research Organisation, SNV Uganda, Uganda Oil Seeds Processors Association, PELUM, FICA Seeds Ltd, Kibeedi &Co Advocates, the Ssemwanga Center for Agriculture and Food Ltd, WinWood Millers Ltd, CHAIN UG Ltd, Uganda Christian University, MAAIF. From the Netherlands: Away4Africa B.V., Alterra / WUR, WUR, VU, KIT, International Solis Research and Innovation Centre, Enza Zaden BV, Hanze University of Applied Sciences.

 Under NICHE I, 1 educational capacity building partnership was established in Uganda. The partnership which took place from 2011-2015 focussed on 'Enhancing Capacity for Agricultural Research and Training at Gulu University', and involved Gulu University, ICRA, KIT and University of Greenwich.

- One relevant partnership on capacity building in education was established with support of NICHE II / Innocap. The partnership focused on "Establishing a (virtual) Centre of Excellence (VCoE) linked to practical locations, where Knowledge and Research blend into practical ready-to-use application and training tools". It involved TVET cooperation between Agromax Limited in Uganda, and Lentiz Education Group and Delphy from the Netherlands.
- No partnerships on mobility / staff / student exchange were established under the Erasmus+ programme.
- In Uganda 2 relevant PPPs on entrepreneurship development and food security were established with support of FDOV. These were named:
  - Flying Food;
  - Sustainable and secure smallholder systems@scale.
- In addition, 9 TMTs and 1 refresher course were implemented for Uganda with support of NFP II.
   Examples are:
  - TMT on Innovation and entrepreneurship to aid agricultural value chains capacity, for Makerere University / College of Agricultural and Environmental Sciences;
  - TMT on Competence based education and entrepreneurial skills for agribusiness, for Bukalasa Agricultural College (BAC);
  - TMT on Managing Agricultural Research for Impact, for the National Agricultural Research Organisation (NARO);
  - TMT on Sustainable & effective crop-management, for Uganda Tropical Plants Association (UTAP);

Dutch training providers included amongst others Delft University of Technology, WUR, DLV Plant BV and CINOP Global.

• A total of 4 relevant PSD Apps were used, involving a.o. an agribusiness market scan and an agri-machinery mission.

# Characteristics of partnerships

- The questionnaire has revealed some insights in the characteristics of the partnerships. Four Dutch institutions indicated to be involved in partnerships in Uganda: ACWFS & CIS-VU, Vrije Universiteit Amsterdam, Has University of Applied Sciences, ISS / Erasmus University Rotterdam, WUR / CDI (five examples). The partnerships included research and educational cooperation and capacity building.
- Local partners included: Nazmisi Training Institute of Social Development (NTISD), Makerere University, Institute of Tropical Forest Conservation (ITFC), Mbarara University of Science and Technology. Other partners/members of consortia: TNO, Ghent University (Belgium), Search for Common Ground (Belgium / Rwanda).
- SHAEA themes addressed in partnerships and cooperation: Agribusiness and Entrepreneurship; Agri-food Systems and Nutrition; Rural Innovations and Agricultural Extension; Agricultural Policy Analysis; and Statistical Analysis, Foresight and Data Management. Themes listed under 'Other': Transboundary NRM and Conflict Resolution.

### Possible alignment with OKP

- In Uganda, OKP interventions for FNS will focus on capacity building support in: business and value chain development (dairy, horticulture and potatoes); (youth) employment creation, climate smart agriculture, regulatory systems (quality control), and relief and development (i.e. agro-skills for youth and host communities).
- Proposed OKP interventions include: improving the quality of- and access to TVET education (i.e. strengthening practical training of agricultural TVET teachers); strengthening collaboration between TVET providers and universities, provision of fellowships and training in climate-smart agriculture and value chain approaches for dairy, horticulture and potatoes.
- Possible opportunities for synergy between OKP and SHAEA relate to SHAEA gap areas: Agribusiness and Entrepreneurship, Agri-food Systems and Nutrition, Agricultural Risk Management and Climate Change Proofing. Interventions can be linked to the SHAEA project component: Strengthening regional anchor universities in Key Gap areas: strengthening institutional leadership and management capabilities, and capacity building support through regional interventions.
- For OKP a key focus will be to support SHAEA initiatives in the quality development of professional education and vocational training through input of new knowledge and innovations relevant for agri-business development, extension services and agricultural skills training.
- For further information on the implementation of OKP in Uganda, please refer to the <u>Country</u> <u>Plan of Implementation</u>.

# 5. Concluding remarks – inventory and opportunities for future cooperation

The inventory was aimed at providing an overview of partnerships and cooperation in agricultural higher education and research, between institutions in the Netherlands and nine prospective SHAEA countries: Kenya, Uganda, Ethiopia, Mozambique, Malawi, Ghana, Ivory Coast, Benin and Cameroon. Partnerships and cooperation engaged in the period 1 January 2015 - 31 December 2017, with a focus on one or more of the 6 SHAEA themes<sup>7</sup>, were of particular interest. The inventory should also provide an analysis of opportunities for relevant institutional linkages in the future.

The inventory has resulted in an interesting overview of 97 partnerships that have been established with support of selected Dutch and EU funding mechanisms. Out of these partnerships, 54 focused on research cooperation, 39 on educational capacity building, and 4 on education / mobility cooperation. Most partnerships involved cooperation with Kenya, Ethiopia, Benin, Ghana and Uganda. A few partnerships were established in Mozambique and Malawi. In Cameroon only 1 partnership was established, in Ivory Coast 0.

<sup>7 1)</sup> Agribusiness and Entrepreneurship, 2) Agri-food Systems and Nutrition, 3) Rural Innovations and Agricultural Extension 4) Agricultural Risk Management and Climate Change Proofing 5) Agricultural Policy Analysis 6) Statistical Analysis, Foresight and Data Management

It was furthermore noted that the partnerships reflect involvement of different types of stakeholders, such as research institutes, higher education institutes, vocational education colleges, training institutes, GOs' and NGOs, private sector parties. Moreover, 18 Public-Private Partnerships have been established as part of the FDOV scheme.

The number and types of partnerships that have been established, as well as the mechanisms made available by the Dutch government, show proof of the deep interest and strong commitment of the Netherlands to cooperation in education and research, as well as private sector development in the area of agriculture and food and nutrition security in Africa.

The partnerships - specified per country in the previous paragraphs - are considered an important basis for future cooperation, and could serve as input for further discussions between Dutch stakeholders and prospective partners, national governments, and regional / international organisations and networks (e.g. RUFORUM, World Bank, FAO, CGIAR, etc.). The existing partnerships could open doors and serve as a stepping stone to make new contacts and to revitalise existing relationships - exploring future areas for cooperation and searching for relevant partners. The study furthermore reveals that each partnership represents a unique combination of types of stakeholders involved in the cooperation, a special thematic focus, the attention for policy relevance and focus on the linkage with labour market needs.

Opportunities for future cooperation and linkages have been assessed in particular in relation to OKP and SHAEA, and the synergy between the two programmes:

- For SHAEA it was found that three SHAEA themes (Agribusiness and Entrepreneurship; Agri-food systems and Nutrition; Rural Innovations and Agricultural Extension) provide most opportunities for further cooperation under SHAEA, on the basis of the number of existing partnerships in these themes. As far as countries are concerned, most opportunities for further cooperation under SHAEA were found in Kenya, Ethiopia, Benin, Ghana and Uganda, based on the number of partnerships in these countries. It should be noted that following the results of the questionnaire potential is seen for future collaboration in all SHAEA themed initiatives. Institutions are open to exploring opportunities in countries where they are not currently active, such as Cameroon (ACWFS &CIS-VU, Aeres Group), Malawi (ACWFS &CIS-VU, Aeres Group) and Benin (HAS Den Bosch).
- For OKP it was found that Food and Nutrition Security (FNS) is an important theme in the programme. The following six OKP (full programme) countries have a specific focus on institutional cooperation on FNS and align as such with the selected SHAEA countries: Benin, Ethiopia, Ghana, Kenya, Mozambique, Uganda. The Country Plans of Implementation (CPIs) of these countries provide more detailed information on themes and eligible organisations for partnerships and cooperation under OKP.
- The CPI's provide opportunities for cooperation / added value in relation to specific themes in countries, such as:
  - improving the quality of / access to TVET education and strengthening collaboration between TVET providers and universities, provision of fellowships and training in climate-smart agriculture and value chain approaches in Uganda;
  - Improving the quality and employability of ATVET graduates related to dairy and horticulture; strengthening the capabilities of TVET teachers in necessary (practical) skills for agricultural production and processing; improving the development and dissemination of (new)

technologies to increase sustainable agricultural production; and developing and strengthening linkages between ATVETs and other stakeholders (universities, private sector, farmers and suppliers) in Ethiopia.

- Synergies between the programmes in principle are only possible in the following overlapping countries: Benin, Ethiopia, Ghana, Kenya, Mozambique, Uganda. A review of the available CPI's of OKP reveals specific opportunities for synergy between OKP and SHAEA per country. Various focus and interventions areas of OKP provide room for alignment with specific SHAEA gap areas and needs, as explained per country. In Kenya for example, a key focus of OKP will be to support SHAEA initiatives in the quality development of professional education and vocational training through input of new knowledge and innovations relevant for agri-business development, extension services and agricultural skills training.
- The added value of partnerships involving Dutch cooperation, as discussed / reflected upon during the stakeholder consultations in the period July – September 2018, is the specific expertise in (many) different thematic focus areas, the added value of tri-partite cooperation, the focus on labour market needs and private sector involvement in education and training, and attention for the linkage between / continuation of (1) lower / medium level vocational education and training and (2) higher (professional) education and research.

Further discussions between representatives of RUFORM, the World Bank, (prospective) SHAEA anchor universities in selected countries and representatives of Dutch higher education and research institutions, supported by intermediary roles of the Food & Business Knowledge Platform and Nuffic, could take the opportunities for synergy and existing partnerships and interests into consideration.

We hope that the results of this inventory will contribute to creating mutual benefit and set-up sustainable cooperation networks in the framework of SHAEA and OKP, and beyond.

# ANNEX 1 Overview of relevant programmes / instruments reviewed

- The Food & Business Global Challenges Programme (GCP) is a transdisciplinary research programme on food security. It supports the development of new products, practices and policies that improve food security in Low- and Middle-Income Countries (LMICs). Examples of projects include sustainable horticulture in Chile, improvement of the cocoa sector in Ghana, empowering women food entrepreneurs in Kenya, and efficient fishery chains in Indian cities. The programme aims to generate understanding of emerging key issues in food security and the role of the private sector. GCP is financed by the Dutch Ministry of Foreign Affairs and NWO-WOTRO Science for Global Development. The Food and Business Knowledge Platform supports the programme by articulating knowledge demands, developing joint knowledge and sharing results.
- The Food & Business Applied Research Fund (ARF) is a research programme for relatively short research projects on applicable innovations that enhance food security in the fifteen partner countries of Dutch development cooperation. Examples of projects include fortification of cereals with milk protein in Uganda, breeding spider plant (a local vegetable) for West and East African markets, developing a crop-management application for farmers in Bangladesh and formulating a plan for certified soy seed production in Benin. ARF is financed by the Dutch Ministry of Foreign Affairs and NWO-WOTRO Science for Global Development. The Food and Business Knowledge Platform supports the programme by articulating knowledge demands, developing joint knowledge and sharing results.
- The 'Research for Inclusive Development in Sub-Saharan Africa (RIDSSA) programme provides funding for research that investigates how the current growth of many African economies can be guided so that it becomes more inclusive. It supports research that leads to practical advice and policy descriptions for more inclusive African development through structural transformation, with specific attention to the role of strategic actors in such transformation processes and to more inclusive productive employment policies. The programme had two Calls for proposals, focused on: (1) Strategic Actors for Inclusive Development and (2) Productive Employment.
- Erasmus+: the European Union's Erasmus+ programme is a funding scheme to support activities in the fields of Education, Training, Youth and Sport. The Programme is made up of three so-called "Key Actions" and two additional actions. They are managed partly at the national level by National Agencies and partly at the European level by the EACEA. The European Commission is responsible for Erasmus+ policies and oversees the overall programme implementation. Key Action 2: cooperation for innovation and the exchange of good practices offers opportunities for amongst others capacity building in the field of higher education supporting cooperation with Partner Countries. The desk study has focused on cooperation of Dutch institutions cooperating with partners in the nine countries.
- NICHE II: the Netherlands Initiative for Capacity development in Higher Education aimed to contribute to sustainable strengthening of higher education and TVET capacity in the partner countries. The programme was initiated and funded by the Dutch Ministry of Foreign Affairs and ran until mid- 2017. NICHE and NFP merged in 2017 to form the Orange Knowledge Programme (OKP).

- NFP: the aim of the Netherlands Fellowship Programme (NFP) was to help reduce the shortage of skilled workers in the selected countries. Fellowships were awarded to professionals for training and study programmes facilitated by Dutch higher education institutions. The programme was initiated and funded by the Dutch Ministry of Foreign Affairs and ran until mid- 2017. NICHE and NFP merged in 2017 to form the Orange Knowledge Programme (OKP).
- FDOV: the Facility for Sustainable Entrepreneurship and Food Security (FDOV) encourages public-private partnerships in the field of food security and private sector development in developing countries. The overall objective is to improve the food security situation and to strengthen the private sector in developing countries, in the best interests of the overall population. Netherlands Enterprise Agency (Rijksdienst voor Ondernemend Nederland - RVO) administers FDOV at the request of the Ministry of Foreign Affairs of The Netherlands.
- PSD Apps: the various Apps in the toolbox can assist embassies in their efforts to create a business-enabling environment, remove trade barriers and in matching local and Dutch business partners, in order to shape the local implementation of the Dutch agenda for Aid, Trade and Investment. Matchmaking, Government to Government assistance, training of managers and entrepreneurs, trade missions to and from developing countries, transfer of knowledge between educational or knowledge institutions such as universities in a given country and in the Netherlands are some examples of these initiatives.

# ANNEX 2 Overview of SHAEA themes represented in partnerships, per country and institution

(Questionnaire information)

Overview of SHAEA theme by country

Country/ SHAEA theme	Agribusiness and Entrepreneurship	Agri-food Systems and Nutrition	Rural Innovations and Agricultural Extension	Agricultural Risk Management and Climate Change Proofing	Agricultural Policy Analysis	Statistical Analysis, Foresight and Data Management	Other
Benin	1	1	1		1		
Cameroon							
Ethiopia	1	1	1		1		1
Ghana	1	1	1		1	1	1
Ivory Coast							
Kenya	1	1	1	1	1	1	1
Malawi	1						
Mozambique	1	1	1		1	1	
Uganda	1	1	1		1	1	1
Total	7	6	6	1	6	4	4

Overview of countries where institutions are active in SHAEA themes

Country/Dutch institution	ACWFS & CIS- VU, Vrije Universteit Amsterdam	Aeres Group	ASC, Leiden University <sup>1</sup>	HAS University of Applied Sciences	ISS, Erasmus University	Van Hall Larenstein	CDI, Wageningen University & Research	Total
Benin	1	1			1		1	4
Cameroon							1	1
Ethiopia	1	1		1	1	1	1	6
Ghana	1	1		1	1	1	1	6
Ivory Coast							1	1
Kenya	1	1		1	1	1	1	6
Malawi							1	1
Mozambique	1	1					1	3
Uganda	1			1	1		1	4
Total	6	5	0	4	5	3	9	

<sup>&</sup>lt;sup>1</sup> ASC Leiden is/has been engaged in (research) partnerships in Ghana, Benin, Ethiopia, Kenya, Uganda, Malawi and Cameroon. ASC is primarily interested in cultural, sociopolitical and political economy aspects of societies in Africa. Research is primarily clustered around those themes.

# **ANNEX 3 List of abbreviations**

ACWFS	Amsterdam Centre for World Food Studies and the Centre for International Cooperation, Vrije Universiteit Amsterdam
ARF	Food & Business Applied Research Fund
ASC/UL	African Studies Centre, Leiden University
ATVET	Agricultural Technical and Vocational Education and Training
CPI	Country Plan of Implementation
FDOV	Facility for Sustainable Entrepreneurship and Food Security
FNS	Food and Nutrition Security
GCP	Food & Business Global Challenges Programme
IATI	International Aid Transparency Initiative
ICRA	International Centre for development oriented Research in Agriculture
KIT	Royal Tropical Institute
MSM	Maastricht School of Management
NFP	The Netherlands Fellowship Programmes
NICHE	The Netherlands Initiative for Cooperation in Higher Education
NWO-WOTRC	) The Netherlands Organisation for Scientific Research, Science for Global Development
NWO-WOTRC	-
	Development
OKP	Development Orange Knowledge Programme
okp PPP	Development Orange Knowledge Programme Public Private Partnership
okp ppp pSD	Development Orange Knowledge Programme Public Private Partnership Private sector development
okp ppp psd Ridssa	Development Orange Knowledge Programme Public Private Partnership Private sector development Research for Inclusive Development in Sub-Saharan Africa
okp ppp psd Ridssa Ruforum	Development Orange Knowledge Programme Public Private Partnership Private sector development Research for Inclusive Development in Sub-Saharan Africa Regional Universities Forum for Capacity Building in Agriculture
OKP PPP PSD RIDSSA RUFORUM RVO	Development Orange Knowledge Programme Public Private Partnership Private sector development Research for Inclusive Development in Sub-Saharan Africa Regional Universities Forum for Capacity Building in Agriculture Rijksdienst voor Ondernemend Nederland/ Netherlands Enterprise Agency
OKP PPP PSD RIDSSA RUFORUM RVO SHAEA	Development Orange Knowledge Programme Public Private Partnership Private sector development Research for Inclusive Development in Sub-Saharan Africa Regional Universities Forum for Capacity Building in Agriculture Rijksdienst voor Ondernemend Nederland/ Netherlands Enterprise Agency Strengthening Higher Education for Agri-Food Transformation in Africa
OKP PPP PSD RIDSSA RUFORUM RVO SHAEA SNV	Development Orange Knowledge Programme Public Private Partnership Private sector development Research for Inclusive Development in Sub-Saharan Africa Regional Universities Forum for Capacity Building in Agriculture Rijksdienst voor Ondernemend Nederland/ Netherlands Enterprise Agency Strengthening Higher Education for Agri-Food Transformation in Africa Netherlands Development Organisation
OKP PPP PSD RIDSSA RUFORUM RVO SHAEA SNV TMT	Development Orange Knowledge Programme Public Private Partnership Private sector development Research for Inclusive Development in Sub-Saharan Africa Regional Universities Forum for Capacity Building in Agriculture Rijksdienst voor Ondernemend Nederland/ Netherlands Enterprise Agency Strengthening Higher Education for Agri-Food Transformation in Africa Netherlands Development Organisation Tailor made training
OKP PPP PSD RIDSSA RUFORUM RVO SHAEA SNV TMT TVET	Development Orange Knowledge Programme Public Private Partnership Private sector development Research for Inclusive Development in Sub-Saharan Africa Regional Universities Forum for Capacity Building in Agriculture Rijksdienst voor Ondernemend Nederland/ Netherlands Enterprise Agency Strengthening Higher Education for Agri-Food Transformation in Africa Netherlands Development Organisation Tailor made training Technical and Vocational Education and Training

WU Wageningen University

WU/CDI Wageningen University, Centre for Development Innovation