

# Call for Applications 2021 – Window 2

## Research in growth and transition countries

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## 1. Introduction

The Ministry of Foreign Affairs of Denmark (MFA) provides grants for development research activities as part of Denmark’s international development cooperation. While the Sustainable Development Goals (SDGs) adopted by the United Nations in 2015 constitute an overall thematic framework for development cooperation and research, the overall objective of the Danish support to research cooperation is to contribute to new solutions with new knowledge. In accordance with this objective, grants will be awarded to strategic research cooperation which generates new knowledge relevant to the needs and strategies of partner countries, to Denmark’s cooperation with these countries as well as including substantive elements of research capacity strengthening.

Within this framework, the MFA invites **Phase 1 applications** for grants related to development research with partners in selected growth and transition countries (**Window 2**)<sup>1</sup>. Phase 1 is the first step of a process in which applicants submit **project ideas** leading to prequalification. Phase 2 is the submission of a full application by those selected in Phase 1 (“prequalified”).

For research projects granted under the 2017 and 2018 application rounds, the responsible institution is invited to submit an application to be considered under the present Call, which may be granted as an extension project. The announced research themes, eligible countries, time and budget frames as well as other selection conditions stated in this Call will apply to such applications.

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<sup>1</sup> The Call for research in Danida priority countries (Window 1) is available on [DFC’s website](#).

The total allocation available for development research funding (Window 1 and Window 2) in 2021 is approximately DKK 180 million. The funding is conditional on approval by the Danish Parliament of the 2021 Finance Bill.

The deadline for submission of Phase 1 applications in Window 2 is **26 February 2021 at 13:00hrs CET**. Applications must be submitted in English and electronically via the e-application system (SurveyMonkey Apply).

The Danida Fellowship Centre (DFC) administers the MFA's support to development research. For questions concerning the application procedures and in general relating to this Call for applications, please contact the Research Management Team at DFC at [research@dfcentre.dk](mailto:research@dfcentre.dk).

For introduction to the Call, advice on how to make a good application, and the e-application system, please refer to [DFC's website](#).

## **2. Eligible countries**

The research must be implemented in one of the following growth and transition countries involved in the Strategic Sector Cooperation with Denmark: Bangladesh, Egypt, Ethiopia, Ghana, Indonesia, Kenya, Myanmar, South Africa, and Vietnam.

## **3. Research themes**

The thematic focus areas of the Call are:

1. Renewable energy
2. Environment, including manufacturing, urban development and waste
3. Water resources, including urban water
4. Food quality, including food safety
5. Health systems, including occupational health and safety (OHS)
6. Maritime development

The country-specific themes are available in Appendix A.

*See under "Useful links" for information concerning the Danish Strategic Sector Cooperation and the role of sector counsellors.*

## **4. Project duration and grant**

The duration of Window 2 projects is from 18 to 36 months with a maximum grant of DKK 5 million for each project.

## **5. Main applicant**

Applications must be submitted only by universities or by a research-based institution (public or private) in Denmark, which will be responsible for the grant. The project coordinator must have an affiliation with the applying institution.

At the time of submitting the application, the project coordinator must hold a PhD or equivalent qualification, documented clearly in the CV. Documented evidence that he/she is a Professor, Assistant Professor, or Associate Professor is regarded as equivalent to a PhD.

Experience shows that the project coordinator plays a key role in ensuring that a research collaboration project is successful. An effective engagement/ involvement of the project coordinator will entail a substantial workload, noticeably at the beginning of the project.

It is important that the project coordinator and the research team are able to document relevant scientific merits and qualifications as well as a research background within the topic applied for. A person may appear as project coordinator on several applications, but only one project per project coordinator may be approved for this funding window.

## **6. Project participants**

The application must list all partner institutions in growth and transition countries, partners in Denmark, and possibly international partners. At least one researcher from each partner institution (project participant if private sector partner) must be named in the Phase 1 application (Task: Project participants in the e-application form).

Research collaboration is considered an important means to strengthen research capacity. In order for research partners to benefit from the collaboration, partnerships should be equal, and partners must contribute actively in preparing both Phase 1 and subsequent Phase 2 application (if prequalified). Other important aspects of equal partnerships include joint fieldwork, joint publishing, knowledge sharing, access to databases and libraries, etc.

It is strongly encouraged to involve partners from the private sector and national authorities in the partner country or in Denmark in the research project, and grant funding can be used for their direct input to project activities, but not overhead expenses. Such partners are encouraged to contribute with additional resources (funding or in-kind) for the projects. International research institutions and research institutions in countries outside Denmark and outside the growth and transition countries can equally be supported by the grant for their direct input to the project activities with no overhead.

As the project duration is only up to three years, it is not envisaged that PhD studies can be included. Direct input of ongoing PhD studies may be included.

## **7. Description of project idea**

The description of the **project idea** must be structured according to the indicated headings and in the stated order. All headings must be used and none added. It is important to ensure that the application is clear and focused, and although there are no requirements regarding the length of each section in the project description, the project description as a whole must not exceed 10,000 characters (including spacing) plus references.

### **Heading 1: State of the art, rationale, and relevance**

Background to project objectives:

- Based on a state of the art literature review and a broader development rationale, explain how the research project will provide new knowledge in the scientific field concerned;
- Highlight how the proposed project relates to prior and on-going research in the specific field about which the applicant is aware;  
Describe the project's importance in relation to:
  - The chosen research theme;
  - National development priorities in the partner country related to specific Sustainable Development Goal(s);
  - The strategic sector cooperation. Include an indication of the strategic relevance for the proposed partner institution(s), notably their envisaged involvement in terms of time and resources in the project;
  - Relevance towards the public and/or private sector where appropriate.

### **Heading 2: Objectives and results expected**

- Describe project objectives, including clearly identified research questions and possibly research hypotheses;
- List the main expected scientific results and an indication of the research capacity strengthening.

### **Heading 3: Indicative project methodology**

Outline the methodology, research design, and approach to research capacity strengthening in general terms.

Applicants seeking funding for an extension of a project approved for funding in 2017 or 2018 are required to summarise project progress and results, as well as a justification for continuation of the project.

## **8. Assessment**

The Consultative Research Committee for Development Research (the FFU) in Denmark is assisting the MFA by providing professional and scientific advice in relation to research applications.

Prior to the FFU assessment, sector counsellors at the relevant Danish embassies are invited to assess the relevance of the project idea to the country and theme specific objectives of the Danish Strategic Sector Cooperation and will consult the relevant Danish authorities during their assessment.

The FFU assesses the Phase 1 applications on the basis of three equally weighted criteria as described below: i) scientific quality; ii) relevance; and iii) the potential effect of the research.

The scientific quality of the proposal is evaluated on the basis of the following criteria:

- *The research experience and qualifications of the project coordinator and the team;*
- *The originality and innovative nature of the project, in terms of generating new knowledge.*

The relevance of the proposal is evaluated on the basis of the following criteria:

- *The focus of the project is well-defined with respect to the announced research theme in the chosen partner country;*

- *The project contributes to the overall objectives of the Danish strategic sector cooperation in the country;*
- *Preferably, the project includes public and private sector partners.*

The effect of the research is evaluated on the basis of the following criteria:

- *The potential direct effects with respect to the selected sustainable development goal (s);*
- *The effects of the project in terms of the partnerships with public and private sector which could take the research to the next level;*
- *Strengthened research capacity, which should add value for both the Danish and the partner institution.*

It must be clear that the proposal constitutes a genuine research project rather than being a registration of data, commissioned research, a product development, demonstration project, technology transfer, consultancy, or development project.

In the assessment of applications for a continuation of a previous grant, the value-added of an extension project will be considered, including how the extension project builds upon the outputs and outcomes of the previous grant.

On the basis of the FFU assessment, MFA makes a decision on which applicants should be invited to apply in Phase 2 of the application process. In Phase 2, feasibility of the proposed research project will also be a criterion for assessment. Refer to “Useful links” for Phase 2 guidelines from 2020.

International peer reviewers are involved in the assessment of scientific quality only in Phase 2. The final scientific quality assessment is conducted by the FFU and approved by the Innovation Fund Denmark, cf. § 5, subsection 2 of the Act on Innovation Fund Denmark no. 306 of March 29, 2014, amended in Act no. 384 §35 of April 26, 2017.

If the total number of qualified applications exceeds the available funding allocation, the MFA will select the best projects based on the FFU assessment of the above criteria and consider an even distribution between the countries. If and when required, the MFA will conduct a hearing process in accordance with § 19 of the Danish Public Administration Act.

MFA may make the processing of new applications by the project coordinator conditional on compliance with the terms and conditions of previous MFA grants.

## 9. Application process Window 2

<b>Phase 1 – 2021</b>	<b>Feb</b>	Deadline for Phase 1 applications: <b>26 February 2021 13:00 hrs CET</b>
	<b>March</b>	DFC administrative screening and administrative rejections Embassy assessment of relevance

		Applicant hearing process, if and when required (§ 19 of the Danish Public Administration Act)
	<b>April - May</b>	The FFU assessment of applications Selection by the MFA - prequalification Reply to applicants Invitation and instructions to a full Phase 2 application
<b>Phase 2 – 2021/22</b>	<b>Aug</b>	Deadline for Phase 2 applications: <b>20 August 2021 13:00 hrs CET</b> DFC administrative screening and administrative rejections
	<b>Sept - Oct</b>	Peer reviewing and applicant hearing
	<b>Nov</b>	The FFU assessment of Phase 2 applications
	<b>Dec</b>	Innovation Fund Denmark's approval of FFU's scientific quality assessment MFA selection Reply to applicants Letters of Commitment to approved projects
	<b>Jan - Feb</b>	Agreement on budget, etc. <b>Letters of Grant</b>
	<b>Jan - Feb</b>	<b>Granted projects endorse Letter of Grant and can start up project activities</b>

## 10. Project costs

In the Phase 1 application an estimate of the grant applied for must be indicated. The total grant is maximum DKK 5 million for an 18-36 months' project. Other funding sources and an estimated total project cost should be indicated.

Approximately the same level of researcher work time (in man months) on the project is expected between Danish researchers and researchers in the partner country. It is expected that research institutions in partner countries will provide a monetary or in-kind contribution to the project (salaries, equipment or materials). The actual level of co-funding expected will be agreed during preparations for phase 2 applications. For Window 2 projects granted in 2017 and 2018 applying for an extension project, it would be expected that a substantial co-funding is provided from public or private partners. Co-funding from the Main Applicant is encouraged.

For international research institutions, partners in countries outside the growth and transition country, national authorities and private sector partners, the budget can only include salaries and travel expenses covering their direct input to the project activities, and no administration fees can be covered.

### **Eligible costs**

It will be possible to apply for funding for the following budget items:

- Salaries and emoluments;
- Expenses for trips abroad and fieldwork;
- Project and research materials and equipment;
- Publication, dissemination and communication;
- Administration fees (overhead);
- Research stays in Denmark for researchers from partner institutions of up to six months' duration;
- Annual external audit and a final project audit.

Guiding principles for budgeting in Phase 2 are available under “Useful links”.

## **11. E-application – How to apply**

Submission of a Phase 1 application must be done via the e-application system SurveyMonkey Apply (SMA). The e-application system is accessible [here](#). You will need to create a SMA account, and once this step is completed, the programme “Window 2 - Research in growth and transition countries 2021” can be assessed.

After submitting the application, the applicant will receive an e-mail acknowledging receipt. It is also possible to see whether an application has been submitted or not under “My applications”. If any doubt occurs as to whether an application has been submitted or not, the applicant should send an e-mail to [research@dfcentre.dk](mailto:research@dfcentre.dk) to enquire whether the application has been submitted. This must be done before the deadline, since applications will not be accepted after deadline.

The Phase 1 application must comprise the completed **e-application form, including CVs and endorsements**.

**CVs:** The CVs must specify the scientific qualifications, managerial skills, and experience from developing countries, and must include a list of key publications and patents relevant for the application. The length of the CVs must be no more than 2 pages per person. Signature on CVs is not required.

**Endorsements:** The endorsements are mandatory by the Head of the responsible institution/department and project coordinator as per the e-application form.

All tasks in the e-application form must be completed, and the application including appendices must be written in English. Only the required appendices will be considered. The appendices must be named "CV - Name of the researcher/project participant". It is advised not to wait until the last minute before deadline to submit the application, to account for any unforeseen issues on the applicant's side.

## 12. Obligations

Applicants should familiarize themselves with the following before using the e-application system and submitting an application.

### **The responsibility of the applying institution**

The applying institution is responsible for ensuring that all information in the e-application is correct, that the required appendices are uploaded with the e-application, that the contents of the appendices are correct and that the e-application has been submitted before the set deadline of the Call.

It is not possible to make corrections to an e-application after it has been submitted, except for corrections related to personal information, such as change of e-mail address.

In the event of any subsequent substantial changes affecting the submitted application, the applying institution must immediately notify the Research Management Team at DFC at [research@dfcentre.dk](mailto:research@dfcentre.dk).

The application must reflect possible legal, regulatory or ethical issues and considerations, including required standards or authorization requirements (such as production standards, quality systems, scientific ethics, data handling and protection, use of animals), as well as research permits, provision of information to relevant authorities, etc., and a plan for obtaining these.

### **Storage of information and data protection**

When the e-application system is used, the system will automatically register the applicant's identity, IP address, and the time at which the application was created or last edited. All personal data will be processed, stored and deleted in accordance with the EU General Data Protection Regulation (GDPR) and the [DFC Privacy Policy](#). We also refer to the [privacy policy of Innovation Fund Denmark](#) being the institution approving the scientific quality assessment made by the FFU in the subsequent Phase 2 of the application process.

### **Technical disclaimer**

DFC is obliged to inform prospective applicants of any system errors that make the e-application system unavailable, affecting the applicant's possibility of submitting e-applications within set deadlines. Information regarding such unavailability or other unforeseen events will be posted on [DFC's website](#).

DFC accepts no liability for incorrect information due to software errors, calculation errors, transmission errors and similar errors, or for any claims for damages due to incorrect use of the e-application system.

### **Rejection of applications without substantive consideration**

An application will be rejected by DFC without substantive consideration by the FFU and the MFA if the requirements concerning the eligibility of applicants and countries, the application format and attachments and the deadlines as set out in this Call for applications are not met.

### **Other data which may be obtained by official bodies**

The MFA and the FFU reserve the right to obtain information about any previous and current

applications which an applicant may have submitted to the FFU, and this information may be included in processing of the application.

In the event that project funding has been or will be applied for from elsewhere, the MFA and the FFU reserve the right to obtain information as to whether the amount has been granted.

### **Use of funding for other purposes**

The MFA may, at its discretion, decide that a proportion of the funding available is to be used for other research cooperation.

### **Announcement**

Once the submitted Phase 1 applications have been processed, an announcement will be made on [DFC's website](#), as to who have been invited to submit a Phase 2 application. In support of that announcement, the following information may be published on the internet: applicant' name, title, workplace, title of application and expected application amount. The purpose of this is to enable applicants to apprise themselves of other prospective programme applicants and research activities and possibly form their own networks with a view to submitting joint applications.

Information about applicants who are not invited to submit a Phase 2 application may be disclosed in the event that access is applied for according to the Danish Public Records Act (Offentlighedsloven). Access to such information may be granted in the form of lists of who has applied and for what purpose (applicant names and application titles). Applicants should, therefore, ensure that their application title does not reveal information about the activity that they wish to keep out of the public domain.

## **13. Useful links**

[Sustainable Development Goals](#)

[Strategic Sector Cooperation](#)

[The Consultative Research Committee \(FFU\)](#)

[Guide to making a good application by FFU](#)

[Guide to the e-application system SurveyMonkey Apply](#)

[Guide to the role of sector counsellors](#)

[Invitation and guidelines for Phase 2 applications 2020 \(for reference\)](#)

[Guiding principles for budget making in Phase 2 W2 \(for reference\)](#)

## **Appendix A – Research themes for Window 2**

The global 2030 agenda and the seventeen United Nations Sustainable Development Goals (SDGs) constitute an important framework for development cooperation and for funding research. It is envisaged that research projects and collaboration with respect to the selected research themes will be undertaken within the context of the relevant SDGs and that these will be reflected in the justification for the research proposed. As indicated in the following, the thematic focus areas of the Call are country specific and have been determined on the basis of the Strategic Sector Cooperation (SSC) agreements in each of the countries.

### **1. Renewable energy**

#### **Egypt**

Egypt possesses an abundance of land as well as high wind potential making it a prime location for renewable energy production. There are currently both opportunities as well as the political will to transform the energy sector from being based mainly on fossil fuels to renewable energy, as noted in both the sustainable development strategy for 2030 and the renewable energy plan for 2035. The Government intends to supply 20 percent of generated electricity from renewable sources by 2022 and 42 percent by 2030. Simultaneously there is a strong focus on energy efficiency, especially in the many new cities that are being constructed in order to ease the pressure on the population growth in Cairo.

As Strategic Sector Cooperation (SSC) focuses on wind energy, research into topics such as power sector planning and modelling, the integration of renewables in the power sector and project development would be useful. Other topics such as energy efficiency, district cooling and smart grids would also support the SSC. A regional research focus towards North Africa and/or the Middle East for all the mentioned topics would be highly relevant.

#### **Ethiopia**

Ethiopia has immense renewable energy generation potential based upon its natural resources (hydro, wind, solar and geothermal). It is a high priority for the Government to expand electricity generation capacity to cover national demand, as well as to export electricity to neighboring countries. Current electricity generation is dominated by hydro-power, but the planned capacity expansion will be more diversified and geographically distributed, with a significant share of wind, solar and geothermal power.

The Ethiopian electric power system is characterized by excess demand and lack of stability reducing the security of supply as well as frequent outages. It is a target to enable access to electricity for all by 2025. In this respect further research would be useful, covering topics such as additional energy planning and modelling tools, the role of water as both a source for irrigation and for balancing electricity systems, the integration of renewables into mini-grids and data availability concerning renewable resources like wind.

#### **Indonesia**

There are plans to increase power generation capacity in Indonesia by over 50-60 percent in the next five years, with a significant share from coal-fired facilities. An increased focus on renewables

and on energy savings can contribute to the overall objective of reducing greenhouse gas emissions by 29 percent by 2030 and reaching the target of 23 percent renewable energy in 2025. Intensifying the use of expertise pertaining to renewable energy and energy efficiency is a key component of Strategic sector cooperation (SSC). Within this framework, activities have been developed around energy modelling, planning and integration. Another topic is interconnection and developing smart grids to increase flexibility, robustness and energy security. Further research on energy modelling, the integration of renewable energy and energy markets could complement these efforts, while research in models for increased energy efficiency will contribute to the objectives of the SSC.

## **2. Environment, including manufacturing, urban development and waste**

### **Indonesia**

Indonesia is facing serious waste challenges especially in large and rapidly growing cities. City governments have to deal with increasing amounts of solid waste with inadequate management systems. Challenges include the lack of capacity among the different responsible authorities to enforce the waste regulations, lack of awareness on waste reduction, recycling and the benefits of the circular economy amongst the government, the private sector and the general public. There is also a lack of separate financing mechanisms for waste management.

Strategic sector cooperation (SSC) aims to improve municipal solid waste management and resource efficiency through the concept of the circular economy thereby addressing environmental, economic and health issues. Research is needed to: i) model the concept of the circular economy with various Indonesian stakeholders in order to foster public-private partnerships within the area of solid waste management as well as other sectors; and ii) address barriers and challenges affecting the development and implementation of regulations and policies to improve framework conditions within the sector of solid waste management.

### **Kenya**

Strategic sector cooperation (SSC) aims to make the circular economy the guiding framework for Kenya's manufacturing sector. The focus and starting point is resource efficient industrial production and development with a view to supporting structural changes in the wider eco-system, e.g. urban development, water and waste utilities management as well as material flows. The SSC is based on multi-stakeholder cooperation between the Danish and Kenyan environmental authorities, research institutions, organizations and the business sector. In phase 1 (2015-2020) Denmark assisted in the formulation of the new waste bill. The upcoming phase 2 will shift the focus towards supporting implementation of this bill. This will include environmental data provision and management, waste management, water management, cleaner production, enhanced regulatory and circular business models, sustainable industrial clustering and design and innovative circular models for urban planning and development. Key areas of strategic interest are interventions that can help to increase resource productivity and economic growth, in particular within food waste systems and organic residuals/bio-economy, water and wastewater, housing and construction as well as models for recycling and refurbishing, packaging, systems optimization and capacity utilization, financial and market acceleration models and production optimization.

An established public private partnership comprising research institutions, public authorities and 35 diverse manufacturing companies located in a mixed industrial area with human settlements is the basis for the SSC. However, the approach is nationwide. Within the framework as outlined there are numerous possible research topics associated with developing the circular economy.

## **South Africa**

Skewed and segregated socio-spatial planning during the apartheid era has resulted in “disintegrated” and unequal South African cities. The City of Tshwane (Pretoria) is experiencing rapid population growth, urban sprawl and inner city dilapidation. This puts immense pressure on the administration to transform the social and urban landscape and deliver sustainable water and sanitation, green transport infrastructure, safety and employment opportunities.

Strategic sector cooperation (SSC) addresses some of these challenges through a city-city collaboration that aims to strengthen the City of Tshwane’s project organization, as well as planning documents and integrated planning methodologies. The collaboration draws on the City of Aarhus’s best practice planning tools, experiences with innovative project organization as well as technical solutions. Private sector developers and knowledge institutions in both countries are an integrated part of the collaboration with regard to technical solutions, knowledge transfer and capacity building. The focus is on: a) green and non-motorised transport; b) non-revenue-water and conduit hydro power; c) the design of public spaces; d) mixed-use developments. Research into the dynamics of sustainable cities would be a valuable complement to these efforts.

### **3. Water resources, including urban water**

## **Ghana**

Ghana’s urban population is growing fast and there is strong demand for improved services, infrastructure and livelihoods. The largest urban area and main growth center is the Greater Accra area, including the City of Tema. A growing urban population is an asset for growth but also a challenge in terms of the livability and sustainability of the city. The pressure on infrastructure is huge e.g. urban water, water management and climate resilience.

Strategic sector cooperation (SSC) aims to address these challenges and focuses on water and cities. The partners directly involved are the City of Aarhus and Aarhus Vand (water), and the City of Tema and the Ghana Water Company. Phase 1 of the SSC was launched February 2020 and despite the global pandemic there has been good progress and a large network with other development partners in Ghana has been developed. In this context the following overall research needs and topics have crystalized: i) Socio-economic impact in the city of Tema of climate change and its related water infrastructure challenges; ii) Urban planning requirements in a city characterized by informal development; iii) the financial viability of water and wastewater services in an urban context (including resource efficiency, financial, legal and societal incentives, tariff structures, subsidies and willingness to pay); and iv) Innovative approaches and models for the reduction of non-revenue water and improvement of wastewater management.

## **South Africa**

South Africa is a water scarce country and is currently facing a looming crisis due to a massive back log in water infrastructure maintenance and investment, as well as recurrent droughts driven by

climatic variation and further deteriorating water quality. A water research development and innovation roadmap has been drawn up that identifies research and innovation needs and gaps.

The roadmap indicates the following focus areas:

- Unlocking alternative sources of water with reuse, improved groundwater utilization, desalination and harnessing of storm water, where research needs include assessment, monitoring and social dimensions;
- Exploring ecological (natural water bodies) and built water infrastructure, including landscape level assessment of ecological infrastructure as an alternative to building, the management of ecological infrastructure and “green” water balances (ecological flow assessments; river basin scale hydro-economics; reservoir, river and lake restoration);
- Ensuring greater water efficiency and reduced losses, with associated technical, institutional, operational and social behavioural challenges as well as next generation technology for water efficiency in industries, agriculture and households.
- Applicable water governance, institutional structuring, costing and revenue models that can restore the revenue stream and ensure funding for the urgently needed water infrastructure investments that are needed to ensure sustainable and secure water supply and sanitation in the future.

#### **4. Food quality, including food safety**

##### **Kenya**

The objective of Strategic sector cooperation (SSC) is to improve the food safety, food quality and ability to further process healthy food originating from the horticulture and dairy sectors with emphasis on the control of residues and certain contaminants for the benefit of the Kenyan population and for increased export. This entails introducing a more risk-based and preventive approach to food safety aligned with a value chain focus. Food safety issues are addressed in three ways: i) regulatory and operational capacity building in food and feed safety authorities; ii) the development of the food and feed safety control system with an emphasis on value added in the dairy sector; and, iii) development of the food safety control system with an emphasis on value added in the fresh fruit and vegetable produce sectors. Further research on these topics would be beneficial.

##### **Indonesia**

Development of the agricultural sector is part of the Indonesian government’s strategy to increase wealth, welfare, the standard of living, independence and food self-sufficiency. Danish expertise can support innovative and sustainable food production, as well as knowledge and technical solutions within the food sector. National dairy production only covers around 22 percent of demand, making the country very dependent on imports. In addition, rapid population growth puts the country under enormous pressure to meet domestic demand for milk. Production is based on smallholder farms with very low capacity, low output, limited resources and often-limited framework conditions, such as limited or no access to land and feed, limited access to collection and lack of cold chain infrastructure, poor hygiene, etc. Thus, the Government’s ambition is to promote sustainable development of the dairy sector in order to contribute to the improvement of food safety, as well as to improve the nutritional status of the population.

With a growing population, there is increasing demand for safe and high quality food. The promotion of organic dairy production is considered as a means to improve milk quality to support a sustainable development of the industry. Organic dairying will work as an incentive for increasing the motivation and welfare of farmers and at the same time produce safe and high quality food products for the benefit of the Indonesian population. The focus of the SSC is on ensuring that the current legislation is sufficient to improve the framework conditions for the value chain of organic dairy production and organic control mechanisms. In this context there are opportunities for research into legislation and public health regulations, etc.

## **Vietnam**

Strategic Sector Cooperation (SSC) between Denmark and Vietnam focuses on food safety in the pork value chain. A key concern in Vietnam is the routine use of antibiotics and other compounds to prevent and manage diseases in order to sustain productivity and as part of biosecurity measures. There is an urgent need to reduce the use of antibiotics through, e.g., the implementation of prudent use practices related to antibiotics, improved hygiene and biosecurity measures, disease surveillance and disease prevention through vaccination.

Research is needed to guide the adoption of prudent antibiotic use practices with a starting point in the legislative framework in Vietnam and consistent with a "one health" approach. This may include determining the actual disease risk and status, as well as drivers of current antibiotics use practices and antimicrobial resistance. It is expected that the research will be inter-disciplinary and include intervention and solution-oriented activities with a view to determine the role of relevant stakeholders in achieving behavioral change in antibiotic use practices. Finally, the research should recommend innovative solutions to reduce antibiotic use and resistance that will work in the Vietnamese context.

## **5. Health systems including occupational health and safety (OHS)**

### **Bangladesh**

The economy of Bangladesh is growing fast and the readymade garment sector is the backbone of the economy as a source of employment and export earnings. After largescale deadly accidents in 2012 and 2013, the international community, including international textile companies, reacted strongly to ensure control and improvement of textile factory safety with a focus on building construction and fire hazards. However, other aspects of occupational health and safety and other sectors have not received similar attention. A number of occupational and environmental risks are present in Bangladesh across all sectors.

The objective of Strategic sector cooperation (SSC) is to improve worker's occupational health and safety in Bangladesh through strengthening the Ministry of Labour and Employment (MoLE) and the Department for Inspection of Factories and Establishments (DIFE) by use of Danish authority (DWEA) systems and knowledge. While the first phase focused mainly on the education of master trainers and development of national guidelines with a focus on the textile sector, the second phase focuses on: i) Master trainers; and, ii) Management and planning within DIFE and MoLE. An increased focus on other sectors with significant risks (e.g. construction, shipbreaking) is foreseen.

Thus, further research to address the improvement of occupational health and safety in broad terms, including environmental concerns, would be appropriate.

## **Myanmar**

In 2011 the government of Myanmar initiated a comprehensive reform process aimed at achieving a more democratic, market-based and socially equal society with prosperity for all. Since 2014, labour market reform has been given priority with the explicit aim of promoting sustainable growth and development. At this point in the reform process, however, there is a need to better understand how the strengthening of labour market institutions can contribute to promoting sustained and inclusive economic growth, full and productive employment and decent work for all, including what are currently the barriers and potential drivers for realizing this potential. A particular focus in occupational health and safety research should be given to small and medium-sized enterprises.

## **Vietnam**

The prevention and treatment of non-communicable diseases (NCDs) in primary healthcare is in focus through Strategic sector cooperation (SSC). In Vietnam, as in many low and middle-income countries, the existing healthcare system is oriented towards infectious diseases. As a result, the system is poorly equipped to handle the growing prevalence of NCDs. There are direct consequences for especially for the poor, who are affected by the diseases and by lack of access to prevention and long-term care. A reorientation of the healthcare system with investment in the prevention and treatment of NCDs at the primary level and with new attention to patient self-care and involvement is underway. An essential prerequisite for success in this field is knowledge on how NCDs are experienced and handled by patients, relatives and healthcare professionals. Therefore, further research into these topics would be highly beneficial.

## **6. Maritime development**

### **Ghana**

The Gulf of Guinea is the key trade route and an important livelihood resource for both Ghana and West Africa. More than 90 percent of traded goods are transported by sea. As of July 2019, Ghana possesses one of the most advanced and deepest container terminals on the African continent. Within five years, Ghana expects to enhance container-handling capacity from 800,000 to 3,500,000 containers per year. A growing middle class and focus on infrastructure projects makes this prospect seem within reach.

Major challenges are to ensure that the economic potential of the Gulf is realised in a sustainable and safe manner and to combat piracy, presently on the rise. The overall objective of Strategic sector cooperation (SSC) is to build capacity and strengthen the framework conditions for the maritime sector in Ghana through government-to-government cooperation. The specific purposes are to enhance the capabilities in key maritime institutions and to promote a maritime regulatory and enforcement environment compliant with international standards.

As Ghana and Nigeria are collaborating on a maritime security programme, research themes could include maritime security as well as the commercial and economic impact of piracy. Other themes could be the socio-economic impact of port expansion and other maritime infrastructure

investments, and the political economy of modernising and streamlining container handling. Finally, the following topics might be included in future SSC activities:

- the sustainable use of the maritime domain including *fisheries* – the fisheries Act is expected to be revised - and the coastal environment;
- *Green and sustainable harbours* including waste and water management in commercial ports;
- *Global Sulphur Cap 2020* on reducing sulphur oxide emissions from ships, improving air quality and protecting the environment.

## **Kenya**

The overall objective of Strategic sector cooperation (SSC) between Denmark and Kenya will be to promote economic growth and capacity development through improved framework conditions for the Kenyan maritime sector, which contributes to establishing favourable prerequisites for a free competition and a maritime level playing field that benefits both countries. The specific purposes are to enhance the capabilities in key maritime institutions in Kenya through government-to-government cooperation.

The government of Kenya has signed a deal to expand the port of Mombasa, seeking to boost efficiency at the key transport hub of East Africa. Further research into, inter alia transport efficiency, the integration of hinterland terminals, liner shipping connectivity and port infrastructure on trade flows, job creation, etc. could complement these efforts.