# Evaluation of Danida Support to Development Research (2008-2018): Vietnam Country Case Study Report



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## Abbreviations

BSU	Building Stronger Universities
CIEM	Central Institute for Economic Management
DFC	Danida Fellowship Centre
DIIS	Danish Institute for International Studies
DKK	Danish Kroner
DTU	Danish Technological University
FAO	Food and Agriculture Organization
EU	European Union
EVAL	Evaluation Department (MFA, Denmark)
FCG	Finnish Consulting Group
FFU	Consultative Committee for Development Research
GDP	Gross Domestic Product
GDPR	General Data Protection Regulation
GOV	Government of Vietnam
ICROFS	International Centre for Research in Organic Food Systems (Denmark)
ILSSA	Institute of Labour and Social Affairs
MARD	Ministry of Agriculture and Rural Development
MDGs	Millennium Development Goals
MOET	Ministry of Education and Training
MOF	Ministry of Finance
MOST	Ministry of Science and Technology
MPI	Ministry of Planning and Investment
NA	National Assembly
NAFOSTED	National Foundation for Science and Technology Development
MOLISA	Ministry of Labour, Invalids and Social Affairs
MFA	Ministry of Foreign Affairs
OECD	Organization of Economic Cooperation and Development
SDGs	Sustainable Development Goals
SDU	University of Southern Denmark
UCPH	University of Copenhagen
UNFCCC	United Nations Framework Convention on Climate Change
USAID	United States Agency for International Development
VASS	Vietnam Academy of Social Sciences
VAST	Vietnam Academy of Science and Technology

## **Executive Summary**

#### Introduction

This case study was conducted as part of an evaluation of Danida's support to development research over the period 2008-2018. Together with case studies in Ghana and Uganda, it served to provide an in-depth analysis to complement other information sources for the evaluation. In order to respond to 20 evaluation questions, the case study consisted of a document review, RQ+ analysis and cross-country survey, complemented by 39 interviews with key Danish stakeholders and during a field study in Vietnam to deepen understanding of (in the end) seven purposefully selected projects. This was further informed by a portfolio analysis of 18 of the 37 projects supported by Danida since 2008. The whole portfolio encompassed a total of DKK 163 257 410, spread across several funding modalities. A majority of the funding was concentrated in FFU Window 1 as larger strategic projects (average grant just under DKK 8.0 million) and South-driven projects (average grant DKK 4.9 million), which included the early Pilot Research Cooperation Programme - one of the first sets of South-driven projects initiated by Danida - started in 2009. With Vietnam moving to middle income status early in the decade, it is one of the countries that has received support in 2018 (for two projects) when the Window 2 modality was launched. The country did not receive any Building Stronger Universities programme funding.

Limitations in the execution of the case study meant that stakeholders in government, industry, the donor community and intended community stakeholders could not be reached. Portfolio analyses for all aspects worthwhile examining could also not be done, and systematic information on key aspects to be studied were not available. Nevertheless, triangulation was in most cases sufficient to enable important facts and perspectives to be checked, and to identify patterns across the sources of evidence.

#### Overall assessment

Danida's support for research that can advance development in Vietnam has been highly valued by all stakeholders interviewed in the country. Its focus on local interests and management of projects, the efficiency with which its portfolios of grants have been managed, the attitudes and expertise of Danish researchers in partnerships, visits to Denmark and the few opportunities at times for triangular cooperation that includes several countries from the South are all very positively perceived. Multiple individual and some institutional research capacities have been successfully strengthened, and many worthwhile, often impressive and in principle useful research findings have been generated. Yet there are also many aspects that can be improved, in particular as Vietnam increasingly focuses on its industrialization as driver for development. Much attention is needed to identify key points across the whole support system where a more strategic and also a more practical approach can be implemented to strengthen the positioning of the research support as well as the research processes and findings for impact.

#### Towards relevance

Danida's approach to ensuring that its research funding is broadly relevant to the Global South and specifically to Vietnam's development challenges – if not priorities - has met with considerable success. It has been forward-looking in its early funding, in collaboration with one of the key

ministries in Vietnam, of research on climate change - now an important priority in Vietnam's efforts to build resilience against the effects of climate change. Its calls for proposals based on a South-driven approach have given cooperating researchers in both countries significant freedom to select and offer convincing rationales in their fields of expertise for what they perceived as knowledge gaps in key areas of health, economic and social development. Delivery of concomitant research results is filling gaps in different fields, several of which have brought to Vietnam new techniques and inspired new foci on under-studied areas of work. Importantly, the field-focused, multi-disciplinary projects are strengthening some important basic capacities demanded from researchers interested in supporting the development of their country. Unsurprisingly, retrospectively each topic covered relates to one or more Sustainable Development Goal, although not to critical characteristics of the 2030 Agenda for Sustainable Development such as an integrated, holistic approach to solving problems; "leaving no-one behind"; or explicitly contributing to large-scale transformational change.

However, there is much room to improve the relevance of the funded research to enable a greater impact on Vietnam's development. The tension between the demand for policy- (or business or practice)-oriented research with immediate application, and more academic/publication-orientated research on familiar topics, and with longer timeframes, somewhat removes projects from grappling with urgent national priorities; this space tends to be filled by consulting contracts and major development actors such as the World Bank. It is not clear from the proposal rationales how significant for 'development' the generated knowledge is when aggregated at national level; this depends on how development and development research are defined, a matter that needs clarification in the absence of a Danish or Vietnamese strategy for development research, and then more fully reflected in calls for proposals and assessment criteria. Although the embassy was according to reports during the early years of the PRCP quite engaged, with one staff member designed as a research focal point, that interest has since subsided in terms of active participation, although the sector counsellors participated in certain meetings during the start of Window 2 support. But in general it reflects the difficulty in navigating between current researchers' interests, the business and social interests that are part of middle-income countries' development strategies, and the interests of Danish development cooperation. Window 2 provides an important opportunity to strengthen cooperation between development cooperation and development research strategies.

#### Towards efficiency

The efficiency and flexibility of DFC, and the rigor with which its staff promote and ensure financial management, are strong points in Danida's management of its grant portfolio; it is widely praised by stakeholders. This includes DFC's willingness to give no-cost extensions to project timeframes. The many well-justified project delays (on average 17.3 months for the examined 18 of 37 projects in the portfolio) indicates that support of three years is likely to be unrealistic in view of the challenges posed by development research in the Vietnamese context. At times Danida's current 'light' approach to monitoring and evaluation - although currently well received by stakeholders in Vietnam and in Denmark - did not encourage sharing and learning of research results, diminishing the value of, and buy-in into the system. It still lacks emphasis on tracking outcomes against promises and expectations, and on ensuring that the extent to which the outputs

are the result of Danida's funding is well understood. It also does not enable sufficient insight into who was targeted and reached for the uptake of the research results.

Potential synergies are not sought out after approval of projects and they continue to operate largely in isolation of one another and of potentially complementary donor initiatives. There are no formal mechanisms for discussion or coordination of research projects (or programmes or thematic areas) between Danida and other bi- or multilateral donors. bilateral funding channelled through World Bank Trust Funds and some sector-specific committees initiated by government agencies were the only possibilities noted, but not used. Despite this, there are a few examples where the World Bank has taken further or scaled research endeavours initially funded by Danida. On the other hand, arguments are also made that in Vietnam it is important to ensure that dominant actors such as the World Bank, the Asian Development Bank, UNDP and others do not provide singular narratives and models for development. Diversity should be protected.

### Towards effectiveness

Project objectives for capacity development targets and numbers of publications were largely met, with several large projects producing an impressive more than 30 reports and publications. However, this would not have been possible without the noted project extensions, especially for completion of PhD degrees and overcoming logistical challenges. The extent to which research findings met expectations is less clear, in part as a result of the lack of systematic tracking of results against what was promised, informed by results frameworks with clear targets and indicators; in the limited portfolio analysis only 11 of 18 projects had such detail. Many of the reports remain too incomplete or vague to be used for this purpose. Whether the results of large projects justified the investment is therefore impossible to determine without a more rigorous, comprehensive 'value for money' type of evaluation. However, there is little doubt that significant and useful results were achieved in many projects, as also indicated by the extent and type of publications that have flowed from research funded by Danida.

The collaboration in the research partnerships has generally been good. Vietnamese researchers praised the expertise and attitudes of the Danish coordinators and researchers; most of the interviewees in the participating countries would like the relationships to continue, or have done so in some or other form. Cases of significant success have often been based on long-term trusting relationships and complementary skills, or on respectful and patient (people and) team management as well as continuous efforts at exchange and mutual learning. The mutual exchange visits and/or joint events were found to be particularly valuable.

Yet there were also complaints. Several projects experienced challenges as a result of irregular or miscommunication, cultural differences, widely varying capacities, or expectations around quality and responsibility. The Danish coordinators and researchers who were interviewed were also generally positive, but frequently noted the differences in capacities, especially in the writing of publications and certain technical aspects of the work. Unequal power dynamics were also noted in the form of dominant standards, narratives and models "from the West" – despite projects managed in the South. The few opportunities for triangular partnerships were therefore appreciated. Despite the larger management and financial burden demanded by such projects, where they worked well, researchers in the South were enthusiastic about their value - in particular,

the important realisation that they could also learn from one another, not only from the North, where there are sufficient common interests. Project coordinators found that well designed comparative work made for richer findings.

#### Towards impact

Without doubt the most important contribution of Danida's research support in Vietnam has been the strengthening of local researchers' capacities to do research that can contribute to the development of their country. PhD students were often staff of universities or research institutions, and their capacities therefore also strengthened the institutions in the national innovation system in Vietnam. According to key informants, at this point in the country's development trajectory, researchers need to learn about the most modern techniques and approaches, and about what constitutes 'quality' research - sometimes in areas new to the country. This then also strengthens institutions. Danida's funding has provided such opportunities, and Vietnamese researchers, in particular PhD candidates, noted very significant tangible as well as intangible benefits as a result gaining access to international expertise and facilities, joining international networks, getting exposure to international standards and ways of working, enhancing their reputation and profile, developing project management and supervision skills, having a better chance of winning bids and gaining projects, technical skills sometimes in new areas of work, enhancing their writing and language abilities, and even gaining social skills through interaction with researchers beyond their local peers.

A further advantage of Danida's funding is that under budget pressure, many research institutes in Vietnam have diversified away from their main research core in pursuit of funding contracts; Danida's funding helps to counter this trend. Besides providing much-needed financial resources, it also contributed to the development of new research foci and supported the development of critical research infrastructure. Thought could be given to the fact that 'capacity development' is seen as more or less a one-way affair; it is not in all cases clear that opportunities to learn from Vietnamese colleagues have been utilised, and unconsciously, power dynamics influence research relationships. Yet several senior Danish researchers confirmed that they benefited very much from the opportunity to work in different contexts, with different cultures, and to contribute their knowledge both in terms of science and management.

The concentration in funding led, in most cases, to very productive projects from an academic perspective. Yet development research by its very definition has to strive to have findings taken up and used beyond the academic sector; this has been met with mixed success. The scope of success is in this regard is unclear. A few examples were found of cooperation with companies or communities where the full potential of these opportunities was not explored, and where the emphasis appears to have been on the science and on publication rather than ensuring uptake of results. Yet there were a few good examples of effective and ongoing engagement. A mixed picture also emerged of the extent to which policies had been targeted or influenced. The obligatory policy briefs and, in many cases, special meetings or stakeholder workshops showed in some cases lack of experience, reflected for example in poor communication in policy briefs. Direct channels for policy advice in Vietnam are also limited, including for the embassy, thus reducing the chance of success in influencing policy. Despite such challenges there are also impressive examples of efforts to influence policy that appear to have yielded results. It is unfortunate that in this evaluation such

'impact stories' could not be traced, as this can provide a more systematic and comprehensive perspective on the impact on policy, business and society of Danida's support to development research in Vietnam.

# 1 The Case Study

### 1.1 Introduction

This case study is part of an evaluation of Danida's support to development research over the period 2008-2018, commissioned in June 2019 by the Evaluation Department (EVAL) of the Danish Ministry of Foreign Affairs (MFA), with the aim to find the most relevant, appropriate and effective means of generating new knowledge and strengthening research capacities of value for countries in the Global South. EVAL identified the three case study countries, Ghana, Uganda and Vietnam, on the basis of their having received significant funding across the different funding modalities during the period under review, and thus could complement and deepen insights gained from cross-country portfolio review and survey data.

### 1.2 Approach and methodology

The boundaries and foci of the case study in Vietnam were determined by the 20 evaluation questions and four evaluation criteria - relevance, effectiveness, efficiency, and impact – specified in the evaluation terms of reference and detailed in the inception report. In total, ten projects were selected for study through a document review, interviews (seven covered in practice) and RQ+ analysis<sup>1</sup> (Annex 1), supplemented by data and information obtained from additional projects as part of a cross-country survey and assessment of research quality using the Research Quality Plus (RQ+) assessment framework (detailed in the main report). Several funding windows served as channels for support to Vietnam over the decade under review (Chapter 3), and the case study projects were purposefully selected based on an effort to balance the variety of funding windows, the size of allocations (larger projects were preferred), a spread of participating institutions, climate change as a prominent and early field of work, examples of triangular cooperation, and research that reflected policy, community and business interests.

As reflected in the body of this report, all relevant evaluation questions were addressed to the extent possible through the selected methodology. While the selected projects served as the focus for data collection, a basic portfolio analysis of all 37 projects funded over the evaluation period in Vietnam helped to inform both the project selection and the mapping of key trends (Chapter 3). A further portfolio analysis of 18 of the 37 projects were used to assess completion periods, reasons for delays and the extent of collaboration across disciplines and among countries, and key aspects of the research findings.

The data collection and analyses processes aimed to uncover multiple perspectives, triangulated to the extent possible through the use of both qualitative and quantitative, factual and perceptual information. Data collection consisted of a nine-day field visit by one international and the national evaluation team member, preceded by a preparatory document review of project proposals and reports (Annex 2), context analysis and stakeholder mapping (Annex 3). Semi-structured purposive interviews were conducted – as circumstances allowed, in person, via video/teleconference or, in a few cases through email - with 39 stakeholders in Denmark, Vietnam and Southern partners in

<sup>&</sup>lt;sup>1</sup> Three projects, of which two overlapped with those studied during the site visit.

Indonesia and Tanzania (Annex 4). Confidentiality was guaranteed, and interview notes were recorded and shared only among the evaluation team members.

### 1.3 Challenges and limitations

Fewer persons were reached for interviews than in the other case studies, with fewer contacts available from DFC, details often absent or outdated; efforts to trace such persons were met with only some success. Despite several attempts at contact, there was also a general lack of response to requests for interviews among government and other senior institutional officials. This situation limited opportunities for cross-checking perspectives and filling certain gaps in factual information.

Due to illness of the Vietnamese team member during the period set aside for the case study (September and October), it was not possible to follow up on all matters during and after the field visit). Certain gaps in information therefore remains; the Window 2 project selected could not be studied in depth<sup>2</sup>, and all intended projects and stakeholders were not reached, especially among institutions outside Hanoi.

Few respondents from Vietnam completed the cross-country survey, the result of few contact details available for Vietnamese stakeholders, and the language barrier. The survey was conducted only in English; local languages could not be accommodated within the available budget, especially as the questionnaire had a large number of open questions.

In both the Vietnamese institutions and in the Danish embassy, institutional memory was lost as a result of the long period that had elapsed since the majority of projects were terminated (the result of support to Vietnam phased out in 2013-2016).

Outcome harvesting could not be applied due to a lack of the time as well as opportunities to meet with persons outside the academic environment in industry and in relevant communities.

Nevertheless, despite these limitations, patterns in the data collected and checked against existing documentation provides confidence in the findings. Persons interviewed in Denmark and in the partner countries were forthcoming, while project proposals and reports as well as a few existing reviews helped to fill up gaps.

<sup>&</sup>lt;sup>2</sup> The internal evaluation of Window 2 was therefore used as context for findings

# 2 The Context for Development Research in Vietnam

### 2.1 Introduction

Vietnam stretches along the eastern coast of the Indochinese Peninsula, bordering China to the north, and Laos and Cambodia to the west. Its population has experiencing rapid demographic and social change over the past few decades. Currently it is enjoying a demographic dividend with 70% of the population under 35 years of age, with a life expectancy of 76 years, but the population is rapidly ageing.

### 2.2 Economic reform and transformation

The economy has gone through a series of rapid transformation during the last 25 years, from a low productivity agriculture-based economy to a lower-cost manufacturing base of some light manufacturing industries. This enabled Vietnam to reach the status of a 'lower middle-income' country in 2010. Relatively high GDP growth rates averaging around 6.5% for the last two decades, and improvements in economic development, resulted in overall improvement of the society's welfare as well as significant poverty reduction.<sup>3</sup> In order to avoid the middle-income trap, the Government of Vietnam embarked in 2013 on a re-structuring of the economy with the aim to become an industrialized country by 2020.<sup>4</sup> To achieve this, the national Socio-Economic Development Strategy identified science and technology (S&T) development as the key driving forces for industrialization and modernization. The country also successfully reversed the rapid rise in public and publicly guaranteed debt (just over 57% of GDP in 2019). According to the IMF, the Government of Vietnam has taken various measures to improve the business environment as well tackle corruption.

### 2.3 Policy context for development research

Despite its past performance with impressive economic and social development, Vietnam is now at a critical juncture; its GDP growth has been slowing down in the last decade, in part due to a less favourable international environment: the revival of protectionism, and the fact that the country is no longer eligible for a concessionary rate with the World Bank and other organizations for its development funding. Donors are also shifting to other countries. Previous sources of growth are diminishing and the country is facing the risk of a "middle-income trap". Vietnam will now have to rely more on productivity gains driven by innovation. This will require considerable improvements in domestic innovation capabilities.

These developments have clear implications for development research in Vietnam. Earlier, the focus of development research was on trade liberalization, poverty reduction, pro-poor growth and inclusiveness. More recently, the policy focus has been shifting more towards productivity,

<sup>&</sup>lt;sup>3</sup> Between 2002 and 2018, more than 45 million people were lifted out of poverty. Poverty rates declined sharply from over 70% to below 6% (US\$3.2/day PPP), and GDP per capita increased by 2.5 times, standing over US\$2,500 in 2018.

<sup>&</sup>lt;sup>4</sup> See Decision 339/QD-TTg dated February 19, 2013 by the Prime Minister approving the Master Plan on economic restructuring in association with conversion of the growth model towards improving quality, efficiency and competitiveness during the 2013-2020 period. http://www.chinhphu.vn/portal/page/portal/English/strategies/strategiesdetails?categoryId=30&articleId=10052090 (accessed July 2019)

business, private sector development and innovation. Donors, especially the World Bank, have been in the driver's seat - both in term of development projects and development research. More recently, the donor agencies are increasingly accommodating the Government of Vietnam, with more emphasis on national ownership by Vietnamese agencies.

### 2.4 The donor landscape

Vietnam is one of the largest recipients of development cooperation funding in the world, supported by more than 50 bilateral and multilateral donors. It has thus played an important role in Vietnam's social and economic development. Over the years the flow of development cooperation funding to Vietnam steadily increased, but it has recently started to decline, in part as a result of changing donor priorities amidst Vietnam's economic development.

The majority of development cooperation funding inflow was into infrastructure development to help restructure the economy through the use of modern production methods; between 1993 and 2012, just over 56% of such funding was allocated to infrastructure development related to the transport, communications, energy and manufacturing sectors.<sup>5</sup> In the earlier period, financial support was largely provided by members of the OECD Development Assistance Committee (DAC) and multilateral organizations, with bilateral donors (especially Japan) responsible for 60% of total aid commitments. The remaining 40% was provided by multilateral donors, with the World Bank and the Asian Development Bank (ADB) the largest contributors.<sup>6</sup>

Many countries and organizations phased out their support to Vietnam when it achieved its middleincome country status. The Government of Vietnam faced the challenge of seeking other funds for its development by prioritizing and diversifying its sources of development cooperation. Recently China, Gulf countries and private philanthropic foundations have been playing a larger role in financing development initiatives (Aid and Development 2018)<sup>7</sup>, with varying types of investment and degrees of acceptance.

### 2.5 The national innovation system

Like many other still-developing countries, the national innovation system in Vietnam is characterized by fragmentation and lack of coordination. This constitutes a major problem in building the indigenous technological capabilities needed to strengthen sustainable economic development. At the same time, the system is constantly evolving thanks to a high economic growth rate, hands-on proactive intervention by the government, and an emerging vibrant business sector.

According to current legislation, the National Assembly and Government of Vietnam are in charge of approving national strategies and legislation for S&T development and innovation. The Ministry of Science and Technology (MOST) is considered the key actor, mandated to oversee S&T activities, formulate S&T policies and incentive programs submitted to the national government for approval, and monitor the implementation of S&T strategy plans. Other line ministries such as

<sup>&</sup>lt;sup>5</sup> Foreign Economic Relations Department of the Ministry of Planning and Investment 2011, "Summary report on receiving, management and use status of ODA source in the past time and the trend in the coming time"

<sup>&</sup>lt;sup>6</sup> <u>http://www.netpublikationer.dk/UM/vietnam\_denmark\_synthesis\_report\_jan2017/Html/kap05.html</u>

<sup>7</sup> https://vietnam.opendevelopmentmekong.net/topics/aid-and-development/

Ministry of Education and Training (MOET), Ministry of Planning and Investment (MPI), and the Ministry of Finance (MOF) are also important players in the national innovation system.

A number of publicly funded agencies support innovation and R&D activities. These include the National Programs for S&T development, the State Agency for Technology Innovation (SATI), the National Foundation for Science and Technology Development (NAFOSTED), the National Foundation for Technology Innovation, the National Agency for Science and Technology Information (NASATI) and national programs for laboratory development. One of the defining characteristics of Vietnam's national innovation system is the existence of two important research-performing umbrella organizations, the Vietnam Academy of Science and Technology (VAST) and the Vietnam Academy of Social Sciences (VASS), both ministerial-level government agencies established to carry out basic research.

An important indicator of the strength of a national innovation system is the number of R&D personnel active in the system<sup>8</sup>. According to MOST (2017), Vietnam currently has approximately 4.28 million people with a university/college degree and above, including 24,300 PhDs (41% of whom work in universities and colleges) and 101,000 Masters graduates (35% of whom work in universities and colleges). Although these figures have been rising, they are still very low compared to neighbouring countries, and internationally.

## 2.6 Key developments in the national innovation system

Vietnam has approximately 420 universities, colleges, academies and S&T service organizations. Over the past two decades there have been two important developments with regard to Vietnam's S&T organizations. First, the government has given more autonomy to its public S&T institutions. Decree 115 in 2005 gave autonomy to research institutes, while the Law on Higher Education of 2018 provided for autonomy in higher education institutions.<sup>9</sup> Second, the emergence of private R&D organizations now accounts for more than 52% of the total number of R&D organizations.

Until now, the public sector has been the most important player in the national innovation system. Anecdotes indicate that public R&D organizations have improved their performance thanks to the move towards greater autonomy, although there has been no systemic evaluation of the situation (Nguyen et al, 2018). Concerns have been raised that by shifting S&T organizations too quickly towards commercial projects, they have become good at securing projects yet lack the core research capacities required to diversify into commercial project activities. A recent significant change has been the participation of non-state actors in establishing research organizations, and R&D institutes operated by the private sector and non-governmental organisations now account for 48% of the total. A current challenge is the lack of adequate funding in a large number of public R&D institutes (See Nguyen et al 2018). Furthermore, despite market opening and reforms during the last thirty years, Vietnam's socialist legacy and central-planning structure means that development

<sup>&</sup>lt;sup>8</sup> According to UNESCO, 'S&T personnel' is categorized as personnel who obtain a university or college degree and above, including R&D personnel, while 'R&D personnel' comprises persons directly involved in R&D activities, including researchers, technicians and support staff. <sup>9</sup> See <u>https://thuvienphapluat.vn/van-ban/bo-may-hanh-chinh/Nghi-dinh-115-2005-ND-CP-quy-dinh-co-che-tu-chu-tu-chu-trach-nhiem-cua-to-chuc-khoa-hoc-va-cong-nghe-cong-lap-3291.aspx; <u>http://tiasang.com.vn/-quan-ly-khoa-hoc/Truoc-tien-van-la-tu-chu-trong-cac-vien-nghien-cuu-12358</u> and <u>http://tiasang.com.vn/-tin-tuc/Thuc-hien-tu-chu-trong-cac-to-chuc-KHCN-cong-lap-Con-nhieu-dac-thu-khac-nhau-10703</u>.</u>

research projects tend to go to public rather than private institutions. They are therefore subject to an additional layer of planning and reporting/monitoring.<sup>10</sup>

## 2.7 Investment trends

At present, Vietnam's science, technology and innovation capabilities are weak, and the national innovation system is in a nascent and fragmented state. The role played by S&T policy, although acknowledged in party and government documents, is still marginal and peripheral, both in the business and the public sectors. The Government of Vietnam has recently initiated financial incentives for investment in S&T and innovation, extending tax incentives to enterprises engaged in R&D, and for investment in technologically advanced machinery and equipment.<sup>11</sup>

During 2000-2010, Vietnam's gross domestic expenditures on R&D as a percentage of GDP remained at an extremely low level (0.18-0.2%). The increase in the period 2012-2017 to 0.5% is an encouraging development, although in absolute terms the allocation is still very small. The financial contribution of the business sector has also been consistently rising. Interestingly, recently two of the largest private companies in Vietnam announced that they will set up an innovation fund or foundation to support research activities in Vietnam.<sup>12</sup>

## 2.6 Implications for international development research support

Vietnam's evolution over the past 2-3 decades, with (i) decreasing conventional donor funding; (ii) increasing financing from other international sources; (iii) accelerating industrialization and private sector engagement in R&D, and (iv) increasing emphasis on science, technology and innovation in both public and private sectors, challenges bilateral donors such as Danida to evolve their funding modalities to align with changing priorities. Capacity strengthening remains a priority for research in universities and other public institutions, but will require alignment with Vietnam's industrialization phase. This implies an emphasis on science, technology and innovation skills and areas of research in order to support the need for specialized and competent R&D personnel. However, in line with the need for expertise in societal development, social sciences cannot be neglected. The Government of Vietnam remains keen to attract international development funding, and Denmark has to find its niche amidst changing priorities and growing diversity in funding actors and modalities.

<sup>&</sup>lt;sup>10</sup> According to statistics from MOST, Vietnam had approximately 2,230 S&T organizations by 2016, of which 1,074 were public and 1,154 private institutions.

<sup>&</sup>lt;sup>11</sup> <u>http://english.vietnamnet.vn/fms/science-it/69785/science--technology-firms-can-t-receive-promised-support.html</u>

<sup>&</sup>lt;sup>12</sup> Vingroup Innovation Foundation (see <u>http://vinif.org/en/home/</u>) and Phenikaa Innovation foundation

<sup>(</sup>see http://vneconomictimes.com:8081/article/business/phenikaa-group-launches-university-and-innovation-foundation)

# 3 Danida's Development Research Programming in Vietnam

## 3.1 Evolution in modalities of support

Vietnam was one of Danida's priority countries from 1993 to 2015, and prior to being phased out, was one of the largest recipients of Danish development aid. Since termination of its priority status in 2015, cooperation between Denmark and Vietnam has developed through strategic collaboration with a particular focus on sustainable growth. Despite no longer being a priority country, projects were once again eligible for funding in 2016-2017 based on *The World 2030*, the Danish government's strategy for development cooperation and humanitarian assistance<sup>13</sup>. This national strategy shifted support to Danish research institutions and increased the scope of development research to include both Danida priority countries (*i.e.*, the 'least developed' countries) and 'growth and transition' countries (*i.e.*, middle income countries). Vietnam is therefore still eligible for Danish development cooperation support in specific areas, for example in the global part of the climate envelope.<sup>14</sup>

Danida's support to development research in Vietnam during the period under evaluation consists largely of projects under one main modality: FFU-North-driven and South-driven projects, with some smaller travel grants provided for Master theses (Table 1). However, in recognition of the shifting priorities proposed in *The World 2030*, FFU has allocated grants through two funding opportunities: Window 1 North- and South-driven projects within relatively broad themes, and from 2017, Window 2 projects with research themes aligned with the Danish Strategic Sector Cooperation priorities. Therefore, all projects funded by Danida in Vietnam after 2015 were supported under Window 2.

## 3.2 Key trends

### 3.2.1 Funding trends by modality

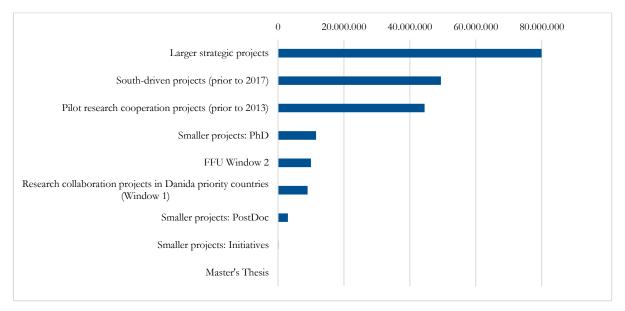
Table 1 and Figure 1 provide an overview of the projects classified by funding modality and project type for the 2008-2018 funding period. Danida's development research in Vietnam for the period under review totaled approximately DKK 162.2 million, with 93.8% allocated through Window 1 (DKK 153.2 million). Although the number of North- and South-driven projects was almost equal, the North-driven projects received more funding – approximately DKK 30 million more. The remainder of the funding was allocated to smaller projects. Travel grants that were not part of FFU were also provided to four Masters students to a total of DKK 71,500.

<sup>&</sup>lt;sup>1313</sup> MFA, Danida. "The World 2030. Denmark's Strategy for Development Cooperation and Humanitarian Action", 2017. <sup>14</sup> MoFA, Danida. <u>https://vietnam.um.dk/en/danida-en/</u>, 2020.

Modalities (bold) and types of projects	Number of projects	Funding allocation 2008- 2018 (DKK)
FFU Window 1	31	153 186 953
Larger strategic projects	10	79 973 261
Research collaboration projects in Danida priority countries (Window 1)	1	8 994 436
Smaller projects: Initiatives	1	200 000
Smaller projects: PhD	7	11 566 285
Smaller projects: Postdoctoral Fellows	2	3 003 188
South-driven projects (prior to 2017)	10	49 449 783
FFU Window 2	2	9 998 957
Master's Thesis	4	71 500
Grand Total	37	163 257 410

### Table 1: Classification of projects per funding modality and project type<sup>15</sup>

Figure 1: Funding allocation 2008-2018 by modality (DKK)



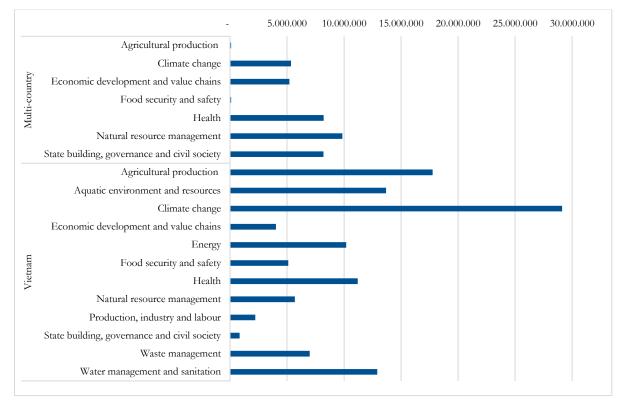
### 3.2.2 Distribution of funding by theme

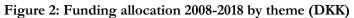
Details of the distribution of support to specific themes are provided in Figure 2 and Annex 5. The climate change thematic area received most Danida funding over the evaluation period, with agricultural production second. Several other themes were also prominent. The thematic funding allocation in Vietnam is largely consistent with the overall funding patterns for Danish development assistance to Vietnam<sup>16</sup> and the priorities expressed in the relevant Danish

<sup>&</sup>lt;sup>15</sup> Sources: Danida Research Portal; financial data from annual reports for 2008-2014 and EVAL's record for 2015-2018.

<sup>&</sup>lt;sup>16</sup> Delegation of the European Union to Vietnam "EU Blue Book - European Union Development Cooperation Activities in Vietnam", 2010 and 2015.

development strategies for the period.<sup>17</sup> This highlights the high priority of the environment and climate change in 2010 as a potentially multiplying force and cross-cutting theme in successive strategies.<sup>18</sup> Notably, the state building, governance and civil society thematic area received much more funding through traditional development assistance than research support prior to 2010.





\*Figures adjusted for multiple project entries due to multiple themes – project's total grant/number of entries. \*\*Multi-country Asia and multi-country International merged for readability.

#### 3.2.3 North-South and triangular cooperation

A small proportion of the projects, both smaller (PhD/Postdoctoral Fellows) and larger projects (Larger strategic projects and Research collaboration projects) are multi-country research projects, all North-driven. Out of the total of 39 projects, seven were triangular engagements (four larger and three smaller projects) – four focused on Asia, including four different South-East Asian countries. Of the remaining three projects, two include cooperation between Denmark, Vietnam and an African country, while one had two Asian and two African partners (Table 2).<sup>19</sup>

Tuble 11 Countries engaged in thangalar project support	<b>Table 2: Countries</b>	engaged in	triangular project supp	oort
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Region	# of projects
Multi-country Asia	4
Multi-country International	3
Grand Total	7
Multi- country cooperation	# of projects

<sup>&</sup>lt;sup>17</sup> The Right to a Better Life – Strategy for Development Cooperation 2012, Freedom from Poverty – Freedom to Change 2010, "Denmark's Development Policy Strategy – Partnership 2000." Copenhagen: Ministry of Foreign Affairs of Denmark, October 2000. World 2030 (2017).
<sup>18</sup> Ibid.

<sup>&</sup>lt;sup>19</sup> Due to time constraints it was not possible to determine how the funds were allocated among the multiple countries.

Bangladesh, Vietnam	1
Cambodia, Vietnam	1
Indonesia, Vietnam	1
Malaysia, Vietnam	1
Mozambique, Vietnam	1
Nepal, Uganda, Vietnam, Zambia	1
Tanzania, Vietnam	1
Grand Total	7

### 3.2.4 Project size

There has been a clear shift from funding smaller projects to larger strategic projects in Vietnam during the period under evaluation (Annex 1). This is in accordance with the changing priorities expressed in the Call for Proposals texts, which in 2010 began to favour large projects that incorporated smaller projects, and since 2014 focused exclusively on supporting large projects (average allocation DKK 7.99 million, nearly double that of the next category).<sup>20</sup> From 2009 onwards there is a noticeable drop in the number of smaller projects funded in each subsequent year (2009:5, 2010:2, 2012:1), before finally phasing out in 2012.<sup>21</sup> This is apparent even when taking into account the overall phasing-out of FFU Window 1 support for projects in Vietnam in 2015.

### 3.2.5 Distribution of funding by institution

There was a variety of research institutions and universities involved in the FFU-projects in Denmark (6) and Vietnam (6) as lead institutions (Table 3) during 2008-2018. The institution that received most funding across both countries was by far the University of Copenhagen, which attracted 2.5 times more funding than the next-most funded institution (Aarhus University). Notably, up to seven different departments at the University of Copenhagen won funding, indicating both size and power in development research (see also Annex 6).

Lead Institution	# projects	DKK
Aarhus University (AU), Denmark	4	20 926 806
Agricultural Genetics Institute (AGI), Vietnam	2	9 900 000
Aquaculture Research Sub-Institute for North Central (ARSINC), Vietnam	1	4 694 767
Danish Institute for International Studies (DIIS), Denmark	1	10 124 980
Geological Survey of Denmark and Greenland (GEUS), Denmark	2	14 722 869
Hanoi University of Science (HUS), Vietnam	1	5 094 892
Plant Protection Research Institute (PPRI), Vietnam	1	4 995 440
Research Institute for Aquaculture No.1 (RIA1), Vietnam	1	4 869 689

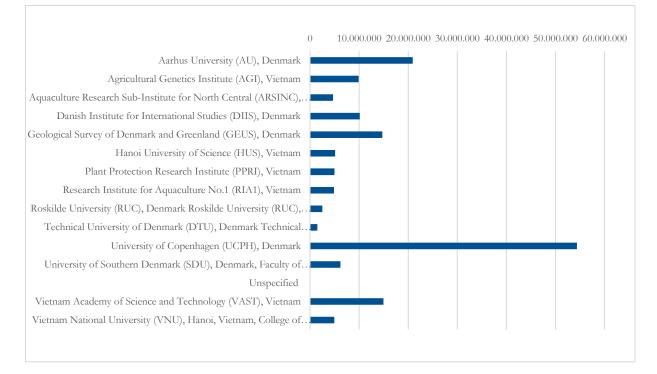
<sup>&</sup>lt;sup>20</sup> Notice - Call for Applications 2010 – Development Research. Call 2014. Phase 1 Applications (prequalification). Danish Ministry of Foreign Affairs. Consultative Research Committee for Development Research. May 2013.

<sup>&</sup>lt;sup>21</sup> Sources: Danida Research Portal; projects in Vietnam 2008 - 2018.

<sup>&</sup>lt;sup>22</sup> Ibid.

Roskilde University (RUC), Denmark Roskilde University (RUC), Department of Society and Globalisation	1	2 505 553
Technical University of Denmark (DTU), Department of Management Engineering	1	1 501 594
University of Copenhagen (UCPH), Denmark	10	54 361 688
University of Southern Denmark (SDU), Denmark	1	6 189 101
Vietnam Academy of Science and Technology (VAST), Vietnam	3	14 944 995
Grand Total	36	161 755 816

### Figure 3: Funding by institution. <sup>23</sup>



The Vietnam Academy of Science and Technology (VAST) was allocated the most funding out of the Vietnamese institutions; it is also by a narrow margin the third-most funded institution overall (Figure 3).

<sup>&</sup>lt;sup>23</sup> Sources: Danida Research Portal; projects in Vietnam 2008 - 2018.

# 4 Findings: Relevance

The evaluation examined the extent to which the objectives of the Danida development research interventions were consistent with national, regional and/or global policies, knowledge needs and priorities in each case study country as well as, where relevant, with the strategic goals being pursued by Denmark.

To what extent, and how does research funded by Danida further advance the SDG agenda as well as partner countries' development policies and strategies?

# How appropriate and relevant are the research themes specified in the calls for research proposals?

The research funded by Danida between 2008 and 2015 addressed critical priorities in the 2030 Agenda for Sustainable Development that are today of great relevance in Vietnam. Despite the fact that Danida's North- and South-driven (Window 1) development research support to Vietnam was phased out before the Sustainable Development Goals (SDGs) became part of national priorities, the emphasis between 2008 and 2014 in the Pilot Research Cooperation Project on climate change and related applied technologies delivered significant expertise and results that are now perceived as highly relevant, even pioneering in the Vietnamese context - "when no one was taking climate seriously in Vietnam", as noted by one of the persons interviewed. Vietnam is today one of the countries most threatened by the risks posed by climate change. Implementation was supported by MOST, and therefore also at the time considered an emerging area of interest for the Government of Vietnam - stimulated by Danish engagement, both in terms of its support to research and in its development cooperation priorities.

A similar situation was found with respect to the emphasis on rigorously and consistently collected country level data for evidence-based policy making, of great importance both for national planning and for informing SDG progress – even though it was initiated before the SDGs were established. Building on work supported already a decade earlier, the project *"Structural transformation and inclusive growth in Viet Nam and Mozambique"*<sup>24</sup> was intended to study, among others, what it would take to sustain development into the future, and Vietnam was considered at the time of particular interest due to its transition to middle-income country status. In this project, which grew out of long-standing relationships between researchers in Denmark and Vietnam, one of the partner institutions was a highly influential government think-tank which has direct access to high-level policy and decision-making agencies. In-depth and high-quality reports and research studies were produced by leading international experts and communicated to government agencies with a view to informing policy formulation for broad-based, inclusive, and sustained growth.<sup>25</sup>

In broad terms, projects were relevant to national interests, but not all were convincingly 'development' orientated or within clear, immediate national priorities. The thematic areas and projects were generally well motivated from a national and, retrospectively, SDG perspective. The latter is not surprising, given the broad nature of each SDG, the focus throughout on practical

<sup>&</sup>lt;sup>24</sup> https://www.wider.unu.edu/project/structural-transformation-and-inclusive-growth-viet-nam

<sup>&</sup>lt;sup>25</sup> https://www.econ.ku.dk/derg/dergarchive/derg-2008-2018/ffu/

application, as well as policy, community and/or potential commercial benefits provides a certain level of justification in a country focused on industrialization with many societal challenges. However, in at least three instances of the projects studied, the arguments around the relevance for 'development' were tenuous, emphasizing the challenge in determining within broad thematic areas with a vast number of potential topics for research, when research is truly development oriented or rather a forced justification for basic research or a pet project; not all theories of change linking projects in countries in the South to development are convincing. Furthermore, proposals did not consistently make reference to specific policies or gaps in knowledge at national level that can prove the importance of the work from a national perspective; although the evaluation could not sufficiently triangulate this with policymakers, it requires a decision by FFU about the extent to which immediate, urgent or significant priorities need to be addressed.

The portfolio of projects reflected only to some extent the integrated nature of 'development' research or research appropriate to address the SDGs. All of the 18 projects studied in the portfolio analysis were multidisciplinary. However, only two combined social and natural sciences. Although the majority of projects were in the natural sciences, societal implications and related matters, as well as the need for a systems approach to solving development problems, were not taken into account through partnering with social scientists.

#### Does the portfolio of research projects adequately respond to knowledge gaps?

**Projects fill knowledge gaps in narrow fields of research, although it is not clear how significant for 'development' these gaps have been**. It is the responsibility of the authors of individual research proposals to identify and address knowledge gaps relevant enough in their field to be accepted for funding. It is also an important criterion for support. Given the significant competition for funding, especially in Window 1, it is therefore not a surprise that most of the projects appear to have well-motivated rationales. The fact that many of the studied projects have solid publications – at least one more than 30 - confirm that this is indeed generally the case. However, the evaluation team has been unable within their scope of work and expertise to determine whether such gaps are indeed significant enough to stand out as a major contribution in a field, and to development challenges in general. The level of ambition in this regard considered by FFU is unclear.

In the absence of systematic diagnostic studies or FFU (or Danida) knowledge gap assessments, it is not clear that the research projects respond to key knowledge gaps at a more aggregate, national level. The World Bank, for example, from time to time conducts a country diagnostics study to identify areas on which they should focus. This 'top-down' approach stands in contrast to the 'bottom up' approach supported by Danida's current arrangement. Although this appears to be a weakness, it is not necessarily so; Danida's approach might complement the work supported by other donors. For example, as pointed out by a key stakeholder in Vietnam, the "*Structural transformation and inclusive growth in Viet Nam*" project contained a survey module focusing on rural land issues which was later taken up by the World Bank and scaled up from the original 12 provinces under the Danida project to the whole country.

There is tension between the demand for policy-oriented action research and more basic academic research with longer time-frames. This tension does not exist in natural basic science

research projects, but arises naturally in development research projects. From the perspective of policymakers, policy research should be done in a timely manner to address a knowledge gap for decision making in order to influence development agenda. However, from the researchers' perspectives it takes time to finalize a research paper and get it published in good journals. Policy briefs prepared after journal publication might simply be too late. This happens even to the project "*Economic Governance and Development in Vietnam and Mozambique*" where many papers are published and policy briefs are produced, while key policy stakeholders interviewed believe that more could have been done to improve the impact and relevance of the project.

# To what extent, and how does research funding contribute to improving Danish international development cooperation?

The lack of a national (development) research strategy hinders the filling of knowledge gaps that can support Danish development strategies. The only strategic framework for development research developed by Danida, "*Strengthening Research Capacity Strategic Framework for Danish Support for Development Research 2014-2018*<sup>26</sup>, was implemented in 2014 until mid-2015 only, due to cutbacks in public funding for development cooperation in 2015-2016. This means that FFU themes are identified annually in an ad hoc manner, without any systematic knowledge gap analysis in support of Danish development strategies.

The difficulty in navigating between commercial interests, development in Vietnam and Danish development cooperation is reflected in periodic and, at present, limited engagement and coordination at embassy level. In Vietnam, the complementarity between Danish development research and international development assistance is to be facilitated by the involvement of the Danish embassy in Hanoi. They are called upon to comment on priorities for FFU calls for proposals and to assess the relevance of concepts for national priorities. They are also requested to support DFC in selecting persons for its scholarship programme or for SSC related courses at Danish universities. For certain projects, funding is made available by Danida through the embassy in Hanoi as part of development cooperation funding. In such cases DFC has a very light touch involvement. In principle such involvement would allow for much closer coordination between research funding and development cooperation than is currently the case; yet in practice the situation is complicated due to the interaction of many stakeholders and players in the local context in Vietnam, the phasing out of donor support and the lack of donor and/or government coordination around the research-development link.

There are no systematic mechanisms in place through the embassies to connect development research with development cooperation strategies and country development plans. In such a context, embassy staff consider it a challenge to enable an effective connection between development in Vietnam and development research, especially as their interest is primarily in trade relations, and their access to government officials elsewhere therefore limited. Sector committees set up in the Ministries of Health and Education had the potential to be used to help raise awareness of the potential application of research findings – "although most research tends to be World Bank studies". However, relevant embassy staff (sector counsellors or 'growth advisors') are usually sector specialists and understaffed with respect to research expertise. They

<sup>&</sup>lt;sup>26</sup> MFA, Danida (2014). "Strengthening Research Capacity Strategic Framework for Danish Support for Development Research 2014-2018.

are not well informed about the value of the supported research, or of specific potentially useful research findings. The interviewed in the embassy did not see particular value in monitoring a database of Danish supported research, despite the fact that there is no systematic knowledge exchange between researchers (or DFC), embassy staff and government representatives. Information and time - and hence the motivation to initiate relevant processes - are lacking, especially as there are no direct links between research projects and development cooperation programming. As noted by one of the persons interviewed, the councillor is a "one-man army" for establishing relationships with government, business and the research sector. They did suggest that a manual with information about ongoing actions to guide them will be helpful.

# To what extent has the portfolio of funded research responded to changes over time (particularly in the "post-2015" SDG era)?

# How appropriate are the modalities and channels of development research funding? ("fit for purpose")?

The South-driven model of cooperation has largely worked well and has received much praise from Vietnamese stakeholders despite some challenges; all partnerships attest to significant development of research and, in some cases, project management capacities. It is seen as a step forward in mutual trust and having greater autonomy, equality, leadership and ownership of development research projects. Support through this modality has developed capacities across the spectrum of partnerships, even where relations have not always been good. The few examples of triangular cooperation show variations in effectiveness, but with very good results and appreciation for the opportunity to develop South-South learning where there has been sufficient common interests and similar or complementary capacities.

The phasing out of support under Window 1 has terminated opportunities to continue to build much-needed research capacities. As indicated in the context analysis, the need for this type of support persists in view of the significant lack of research capacity still very clearly perceived in the Vietnamese university sector. It is therefore unfortunate that the capacities and good relationships developed under this modality of support was phased out in 2013.

Window 2 holds potential for productive research cooperation between Denmark and Vietnam, but this will require careful definition of 'development research', and efforts to ensure symmetrical partnerships. As noted earlier in this section, Danida's research support between 2008 and 2015 has been in areas pertinent to the SDGs, in particular with respect to climate change which was initiated at a time when its importance was not yet recognized. In line with the shifts articulated in Danida's development cooperation strategy, *The World 2030*, its support after 2016 has focused on Strategic Sector Cooperation priorities through Window 2. Although the two projects currently supported through this funding channel were not examined during the case study visit, in principle Window 2 holds significant promise given the strong emphasis on industrialization and innovation. However, this will place demands on the expertise and approach to proposal review of FFU and the embassies, as the political and technical contexts within which these projects are executed, will differ substantially from those in Window 1. It will require reconsideration of how 'development research' is conceptualized, with resulting implications for calls for proposals and review processes. It will also require very careful

development of partnerships to ensure sensitivity to the interests, capacities and attitudes that will make this type of primarily business/industry-oriented research a success.

# **5 Findings: Efficiency**

Efficiency was assessed from the perspective of how well human, financial, and material resources were utilized to achieve the programme objectives, responding to three specific evaluation questions.

# To what extent are the research projects carried out as planned? Are there significant delays or breakdowns?

Significant delays have been the norm in Danida-supported research projects in Vietnam, albeit usually for good reasons, thus raising the issue of whether the initial allocations were unrealistic for the Vietnamese context. The analysis of 18 projects in the Vietnamese portfolio showed that all were extended, on average by 17.3 months, and the longest by 39 months.<sup>27</sup> In most recorded cases the delays were the result of PhD (and even Masters) students not able to complete their studies in time, and/or to finalize and report their results. Challenges with the importing of key equipment, changing weather patterns critical for experiments, illness of key staff, and insufficient time of a part-time coordinator to efficiently manage the project were some of the less frequently mentioned reasons. The project with the longest extension suffered several setbacks of a similar nature, most not under control of the researchers. Some of the project coordinators interviewed also noted that the disbursements in Vietnam could be slow, the result of processes within the Vietnamese system.

The efficiency and flexibility of DFC are highly appreciated, and among most, also the rigor of the financial management expectations. A consistent message from stakeholders interviewed in Vietnam was appreciation for the warm and efficient support by DFC, and their flexibility when special assistance or extension was needed. Flexibility was also displayed in other well-motivated cases, for example, where the Agricultural Genetics Institute of the Vietnam Academy of Agricultural Science was allowed to partner with the International Rice Research Institute (IRRI) in the Philippines when a suitable Danish university partner could not be found for a project aimed at improving the tolerance of rice against submergence and salinity.

A number of stakeholders in Vietnam also noted their appreciation for the financial management procedures and expectations that were in place. Three projects were terminated around 2012 as a result of a surprise audit, with salary payments to project coordinators a particularly contentious issue. Due to the low salaries of academic staff in Vietnam, 'top-up' funding by donors is a common occurrence. Among others, there appears to have been either misunderstanding or misuse of the opportunity to use Danida funding for this purpose. After an investigation the rules around these types of issues were made stricter and clearer for all Danida-supported research projects. The level clarity and rigor was in general appreciated by those with whom the issue was discussed.

<sup>&</sup>lt;sup>27</sup> Informants noted that significant delays in the start-up phase were due to the time-consuming process of obtaining the necessary approvals from national authorities.

One of the stakeholders interviewed noted that the preparation of a proposal for a larger strategic project took the 'excessive period' of three years.

# Are there well-functioning monitoring and evaluation systems set up to track research project and partner funding progress?

Although the M&E system managed by DFC was well received by Vietnamese stakeholders, in practice it has provided limited accountability for, and learning about progress and success. The system contains useful planning and progress information in the first year, mid-term and/or project completion reports, while the annual financial reports allow tracking of allocations and expenditures according to plan.<sup>28</sup> While stakeholders generally welcomed the relatively 'light-touch' reporting, noting that it was better than those of many others, FFU meetings indicated that many reports (not necessarily of Vietnam projects) were often not of the required quality, with sufficient information about what had taken place compared with what was planned. The 'light' reporting with its lack of detail and follow-up also means that there is a chance that not all reported outputs stem from this particular project, or Danida might have been one of many funders of the work. This might mislead when "value for money' estimations are done.

Several persons interviewed stated their disappointment with the fact that key aspects of the reports had not been shared among grant holders; they felt that the information was not (effectively) used. DFC was seen by some as not having sufficient capacity, scientific experience or 'seriousness' to make good use of the reporting and initiate sharing processes around research findings.<sup>29</sup> It was also of concern that not enough attention appears to have been given in reporting to processes of engagement and evidence of uptake (or potential) for uptake and/or use of research results (in line with the RQ+ assessment framework's focus on positioning the research for use).

The dual reporting system in Vietnam was seen by Vietnamese stakeholders as an excessive burden, while Danish stakeholders were critical about the use of logframes. For the Vietnamese partner institutions, administration and monitoring of research funding were not considered to be problematic in principle. However, development cooperation research funding, despite being won through competitive processes, is treated as a government budget allocation, and hence additional public reporting requirements apply. Key stakeholders in Vietnam considered this to be an excessive burden; as reported by one of the interviewees: "All different reporting systems – Danida, MOLISA and the Ministry of Finance. It was crazy!" While Danish project coordinators are generally comfortable with the reporting requirements, one complaint related to the use of logframes or 'theories of change – as noted by one, "this is not the way science works". They find it cumbersome and of very little use, if any, in practice.

### Is the research funding harmonized to an appropriate degree with that of other donors?

In Vietnam, Danida-funded projects operate largely, although not entirely, in isolation of one another, of potentially complementary donor initiatives, and of international initiatives. In the absence of formal mechanisms or formal reporting, and in limited time for interviews it is a challenge to assess with confidence the level of intended or unintended harmony

 $<sup>^{\</sup>rm 28}$  Annual reporting was required for PRCP and its successor

<sup>&</sup>lt;sup>29</sup> During the PRCP phase, meetings were held between research groups to share results. These comments were made by only some of the stakeholders interviewed; DFC's approach has evolved over the years.

between Danida funded research projects and those of other donors. Research institutes receive funding from different donors, and it is reasonable to expect that their research activities might be complementary within their own organization. But there is little evidence of, or incentives for, formal discussions or coordination of research projects (or programmes or thematic areas) between Danida funded research and that of other bi- or multilateral donors; partly as a result of the competitive nature of Danida funding proposals, despite the requirement in calls for proposals to seek harmonization and cooperation with similar initiatives, this appears not to be the norm after allocations have been made. Projects generally do not connect. There are, of course, exceptions, such as the work on REDD+ where the researchers became part of international fora and networks on this important topic, although collaborative work with initiatives outside Vietnam were not pursued.

Although explicit formal coordination may not exist, there is some limited evidence of ad hoc inter-donor cooperation, initiated through personal contact. There is no evidence of an official inter-donor coordination mechanism where research is, or can be, discussed. Bilateral funding is sometimes channelled through the World Bank in the form of a Trust Fund, a form of mechanism that creates some harmony between certain donors; anti-corruption programming between DFID and the World Bank is an often-cited example. Informal channels thus exist between some donors, while certain ministries are said to have sector-specific committees that can accommodate discussions about research initiatives. The World Bank has taken up and scaled Danida funded research projects, with the project "Improving rice tolerance of submergence and salinity to cope with climate change in coastal areas of Vietnamese deltas" a notable example; it has since 2017 continued with World Bank funding.

In Vietnam, cooperation and harmonization may have certain disadvantages, and should be done when benefits are clear. Harmonization and complementarity are generally deemed to be beneficial, but contradicting arguments are made by some with reference to the situation in Vietnam, where very large international funders have very significant power. In Vietnam, development research – often in the form of consulting contracts - is driven mostly by the World Bank and, to a lesser extent, by UNDP, IMF and ADB. Harmonization in such cases might have a downside in that it discourages heterogeneity. In the words of one person interviewed, "It is very important that there are institutions that work differently to the World Bank and other dominant funders, so that other voices can also be heard in the international research environment when it comes to development".

## 6 Findings: Effectiveness

The "Effectiveness" criterion allowed for exploration of the extent to which the objectives of the development research were achieved. It also examined the quality of the relationships between Danish and southern partners, the contributions to capacity development in institutions; and the availability of research results with the potential to promote change within and beyond the academic sector.

#### To what extent have the objectives of the research been attained?

Project objectives with respect to capacity development and publication were largely met. Where sufficient information has been available, a positive picture emerges in terms of the publication and capacity development objectives of the projects. There were a few exceptions; two of the seven projects studied in depth during the case study visit had run into significant trouble one, as noted in the previous section, the result of accusations of corruption after an intensive auditing process; the other due to issues of performance as well as challenges in relationships and in communication throughout the assignment. In at least four of the 18 projects studied during the limited portfolio analysis, none of the PhD students had completed their studies. This means that around 20% of the projects studied (which were about half of all projects included in this evaluation) faced significant challenges. No-cost extensions made this possible: PhDs could be completed, logistical and team challenges could be overcome, and joint publications could be planned and/or completed. Expectations in terms of the latter were mostly met and sometimes exceeded, with at least three projects producing more than 30 reports and publications (all three building on significant prior work).<sup>30</sup> However, since researchers around the world often combine research funding from different sources and for different purposes, the publication content and number might require nuance. Publication tended to be in both Vietnamese and English (in other words, in international journals), respectively led by the senior Vietnamese and Danish researchers involved.

The picture for the extent to which research findings met expectations is less clear, in part as a result of insufficient tracking of results against what was promised.<sup>31</sup> The information generated through monitoring and reporting is not detailed and systematic enough to assess the full extent to which the research objectives have met expectations. Despite the quality assurance process conducted by FFU in cooperation with DFC (and which, as described earlier, changed during the period under evaluation), many of the reports are still too incomplete or vague about the extent to which expectations with respect to the delivery of research results were met, and only 11 of 18 projects in the limited portfolio analysis had any form of logframe or some form of results framework with clear indicators and targets. This situation complicates assessments of delivery of research results, as some basis or baseline for performance has to be set in proposals and then directly and systematically addressed in reports to aid progress and performance reviewers' assessments.

Whether the results of large projects justified the investment is impossible to determine without a more rigorous, comprehensive 'value for money' type of evaluation. However, there is little doubt that significant and useful results were achieved in many projects, as also indicated by the extent and type of publications said to have flowed from work at least in part funded through Danida's modalities.

A period of up to 3 years' support is too short to expect significant research results from (large) development research projects. With the exception of the two ongoing Window 2 projects, all the supported projects initiated during the period under review have been completed.

<sup>&</sup>lt;sup>30</sup> The evaluation did not have access to all publications, as DFC data does not track ongoing publishing after projects have officially closed. Discussions with researchers during the case study visit brought more to the fore than were available in the official records.

<sup>&</sup>lt;sup>31</sup> Within time constraints for the evaluation the analysis of results delivery should be considered preliminary, as it was not possible to make a detailed comparison between what had been promised in the proposals compared to what was reported to have been delivered.

Much appears to have been achieved in a majority of the analysed projects<sup>32</sup> - more or less in line with expectations, and sometimes exceeding them. The (no-cost) extensions (on average 17.3 months) during the period of project support made this possible; a project period of three years is clearly too short for the types of challenges faced by development research, in particular institutional weaknesses and challenges inherent working in the field in sometimes difficult circumstances. The most productive projects built on prior relationships or work done on the topic by the same (or somewhat reconstituted) teams - although it is likely that these publications also relate to other projects and other sources.

Development research by its very definition has to strive to have findings taken up and used beyond the academic sector; this has been met with mixed success. This important aspect is discussed in the next section.

# How good is the research collaboration between Danish and southern partners? What obstacles were encountered?

The collaboration in the research partnerships has generally been good, although several experienced challenges as a result of miscommunication, cultural differences, widely varying capacities or expectations around quality and responsibility. The collaboration between Danish and Vietnamese researchers was generally seen in a positive light by the Vietnamese stakeholders. They praised the expertise and attitudes of the Danish coordinators and researchers, and most would like the relationships to continue, given the capacities that had been developed (in some cases the cooperation is indeed still ongoing in some or other form). The mutual exchange visits and/or joint events were appreciated as good learning and relationship-building opportunities. Cases of significant success have often been based on long-term trusting relationships and complementary skills, or on respectful and patient (people and) team management as well as continuous efforts at exchange and mutual learning.

Yet there have also been complaints: "They did not treat us on an equal basis. All the researchers in Denmark were socio-economists. Their interest was poverty and livelihoods during fieldwork. But this was not the focus of the project. The project was in the natural sciences." "The Danish researchers used the Vietnamese data for papers and conferences without telling us, and without proper references. They also came up with conclusions with which we did not agree, based on our experience as Vietnamese". In another instance the differences were cultural: "The Danish researchers had problems with their diets in the rural areas, and also wanted to stay in separate rooms while we as Vietnamese are used to staying together." On the other hand, one of the projects that had to conduct field work in deep rural areas noted that working with Danish reporting was easier than with other financiers of their research. "The Danes are friendlier than [the others], who expected me to get a red invoice [a tax invoice] in a rural area! How is that possible!"

The Danish coordinators and researchers who were interviewed were also positive, but frequently noted the differences in capacities, especially in the writing of publications and certain technical aspects of the work. "We were not careful in the selection of our partners. Chemistry and competence are important for success.... Southern researchers ... are engaged in too many projects. So we would send out an email and no action is taken. I have to be sensitive even when treated poorly." Some noted the need for time-consuming

<sup>&</sup>lt;sup>32</sup> Selected from the main modalities, the larger strategic projects, the one research project in a priority country, and the early South-driven pilot research projects.

efforts to ensure there was no misunderstanding about any matter, or common understanding of what needed to be delivered. "It was a disaster because the partners were very stubborn. It seems as if their culture is to say "yes" but not to do something. They don't want to be pushed around". One person interviewed suggested that all grants should start as pilot projects so that the partners are not tied down for a number of years if they do not get on. Another noted: "I would like to think there is equality in the relationships. But Western norms are the dominant norms. This is what everyone operates on. So capacity building is also about that. ... Dialogue is necessary to understand these matters".

At a technical level some projects experienced challenges due to the differences between situations in Vietnam and in Denmark. Vietnamese researchers pointed out that, for example, in some of the climate and agriculture (or aquaculture) related work, the weather in Vietnam changes much more quickly than that in Denmark, farmers' plots are smaller, input data are different, and different contexts and cultures influence how models and interventions should be designed and implemented. In at least two of the case study projects, these differences led to some tensions or negotiations between the researchers from the different countries.

Experiences with triangular (North-South-South) collaboration were mixed, but showed good promise where it worked. Several larger triangular strategic projects in Vietnam<sup>33</sup> all highlighted the importance of 'getting it right', especially when working between three or more very different societal cultures. In the most successful instance, the project coordinator made a major effort to ensure frequent communication among all; established teams of junior and senior persons in each country; created opportunities to plan, implement and share results together in a way that maximised common interests and highlighted important differences; and from the beginning, had a 'minimum participation' plan that allocated responsibilities, including in contributing to publications that brought essential clarity about how roles differed yet fitted together.

Researchers in the South started to learn that they could also benefit from one another, not only from the North; and despite apparently being very different societies, there are issues that are similar enough (even more so than in North-South relationships) for comparative work and learning purposes. This deepened insights and established new relationships among researchers in the South. One person interviewed remarked that she realised for the first time that she could also learn from other countries in the South, not only from the North. Trust and mutual understanding were built over time based on 'ground rules' about responsibilities in the team, including for publishing, so that all knew at all time what was expected, while virtual and face to face meetings were arranged to share and learn. One of the projects even attracted more international students, already five from Tanzania, their partner in the triangular cooperation, over the past two years, one of whom who was the coordinator in Tanzania of their collaborative project.

**Common interests and areas to explore are critical for successful triangular relationships**. While in the most successful triangular relationships there were sufficient similarities to allow for "rich comparison". The project was conceptualised based on a clearly identified common issue of interest among the three countries, while the two in the South shared a historical context as well as

<sup>&</sup>lt;sup>33</sup> one with the team made up of researchers from Denmark, Indonesia and Vietnam; a second with researchers from Denmark, Mozambique and Vietnam; and a third with researchers from Denmark, Tanzania and Vietnam

common aspects around the present challenges. In the less successful example, the relationships were influenced by the fact that common interests between partners and commonalities between issues to be explored in each of the countries were not well established during the planning phase. Artificial connections between researchers without sufficient common threads reduced the chance of developing common interests and new insights. Ownership of the collaboration was therefore absent, and asymmetries in expertise caused some tensions. Communication was largely North-South despite efforts to bring the Southern researchers together. Instead of building good relations between the Southern countries, the differences became the most prominent aspect in the collaboration. In essence, the project was turned into several North-South collaborations running in parallel. This does not mean that the project did not bring some benefits to all concerned, and valuable lessons were learned, but the potential of such triangular cooperation did not come to fruition.

## 7 Findings: Towards impact

Assessment of the outcomes and impact of support to development research and capacity building focused on the positive and negative, primary and secondary changes produced through the research support (directly or indirectly, intended or unintended). The main beneficiaries of research funding were identified and how they were affected, and the use of results to influence capacities and policies beyond the academic sector were examined.

#### Who are the main beneficiaries of the research funding? How have they been affected?

#### What difference has the research funding made for institutions and researchers?

# To what extent have the research projects contributed to development of capacities in the partner institutions?

Researchers in Vietnam reported a large number of mostly intangible outcomes from the collaborations, with PhD candidates noting the most significant benefits. The most direct and confirmed beneficiaries were individual researchers and research teams who participated directly in the projects, followed by the participating research institutions. As a result, the projects were all successful in building important capacities. Institutions in Vietnam, both universities and research institutes, benefitted as a result. Many outcomes that researchers in Vietnam and triangular partners in the South themselves considered to be the most important were intangible and qualitative. Typically, most of the individual researchers in teams in Vietnam were PhD students, both full-time and part-time, mostly drawn from university staff. They confirmed consistently during interviews that their benefits from Danida's support had been numerous, enabling them to study, gain access to international expertise and facilities, and gain exposure to international standards and ways of working. Benefits listed by Vietnamese researchers interviewed included

- Enhanced reputation and profile that, in some cases, were perceived as having led to promotions or more opportunities to lead teams
- Project management and supervision skills and enhanced capacities to develop and implement research projects, which gave them confidence to request funding and manage projects as coordinator

- Better chance of winning bids and gaining projects including government projects.
- New connections to international researchers and research initiatives, opening doors for new collaborations during and after project completion
- Opportunities for long-term relationships and collaboration with Danish research partners
- Social skills through visits to Denmark and interactions with researchers beyond their local peers, and better understanding of differences between different cultures
- Technical skills in new fields of work, in a variety of new techniques or in the use of new instruments
- Publications in good international as well as national journals, including as first author.

The South-driven modality contributed to capacity strengthening. Vietnam was the first country to benefit from experimentation with a South-driven modality. Relevant Vietnamese coordinators expressed their appreciation for the opportunity to have taken the driver's seat, not only in proposal development but also in project implementation.

Researchers in Denmark report benefits from the collaboration, but capacity development appears to be perceived as a one-way affair. Research coordinators in Denmark confirmed the benefits derived from working in new areas in new contexts, sometimes with a new network of collaborators. However, minimal mention was made of own capacities being developed.

Participating institutions in Vietnam also benefitted significantly from cooperation with Danida, through staff capacity development as well as the establishment of expertise in new areas. Although the Vietnamese economy has been growing rapidly, research institutions typically suffer from inadequate funding. During the early years of 2000s, due to budget constraints the government was no longer able to provide funding to their own public research institutes, and they initiated reforms to give more autonomy to research institutions. While public funding would be cut, these public research institutes have been allowed and encouraged to take on contracts with the industry or engage in competitive bidding in projects where they could provide services. Under this budget pressure, many research institutes have diversified away from their main research core in pursuit of funding contracts.

In this context, the research funding from Danida has proved to be extremely important for these research institutes to stay to their main and core research areas. Besides providing much-needed financial resources, Danida's funding contributed to the development of new research foci, and installed critical research infrastructure for longer term development of new centres of expertise. For example, in the case of CIEM, thanks to Danida's support over many years, computer-based general equilibrium models were built and maintained at the institute for longer-term use. The project also created two critically important longitudinal datasets that were put to use by some government agencies and ministries such as ILSSA and MOLISA, as well as the wider research community within the country.

Nearly all persons interviewed confirmed that numerous new capacities and also infrastructure were developed in universities that benefitted from Danida's funding. Determining the extent or significance of these contributions is a challenge without systematic, comprehensive information, but interviews revealed several examples where institutionalization took place as a result, such as

the establishment of a new electrochemistry unit in VAST, and the designation of the Vietnamese partner's unit by the World Health Organization as a hub for reproductive health (at the time of the evaluation still to be approved by the relevant Ministries in Vietnam) soon after the successful Danida-supported project was terminated. The persons involved noted that they applied for the WHO unit "because of the confidence Danida's experience gave me". As example of the capacities developed in this case, the Vietnamese researchers noted that they continued working in the same area, even with only a small amount of funding; received more international students including from their Southern partners in Tanzania; learned to supervise students, write publications and select journals for publishing; and manage projects with better planning, from a longer-term perspective than is usually the case in Vietnam, with more consistent monitoring.

Other stakeholders in Vietnam, beyond the academic and research sectors, appear to have had limited benefit from the potential offered by Danish research support. Although in some projects companies also participated, these instances were few (a situation that might change with the implementation of Window 2). The evaluation could not consult with representatives of such companies for deeper insights about the value of the collaboration, nor were their perspectives captured in secondary documentation. However, little is known about any further uptake of research findings as this is not tracked. Several projects reported that they struggled to attract the attention of companies; where contact was made, they were not interested in research. In one project the research results were shared with the water treatment company where the experiments were done, but it is not clear whether the results were used, and no efforts were made after termination of the project to make the results more widely known.

Communities and the Government are also intended beneficiaries of the research; this is further discussed below.

# How well are the research results being used, with respect to promoting and understanding technological, social, economic and environmental changes?

# What changes have resulted from Danida research funding, notably with respect to development policies in the fields/topics investigated?

The concentration in funding led, in most cases, to very productive projects from an academic perspective. Most of the projects examined as part of the case study produced impressive numbers of publications – some extraordinarily so. In one four-year initiative the collaboration produced more than 30 policy-relevant papers and the engagement of "some 40 researchers, six research institutions and multiple international research networks". Another is said to have produced 30 papers in international journals, nine papers in national journals and four book chapters. A third aimed for 25 publications in international peer reviewed journals but ended with 33 published and several more in line for publication, as well as 19 Vietnamese journal publications. A fourth produced 26 national and international papers and two monographs. Understandably, academic output and related capacities appear to have been the most important focus for research teams in terms of performance. On the other hand, the high number of publications reported as following from research grants over a period of 4-6 years might also in part be the result of blended funding and outputs garnered from overlapping projects (this was not systematically studied or interrogated during interviews).

Well-designed and targeted projects can bring about significant capacity changes in under-resourced areas of development. In the context of a rapidly growing country like Vietnam where international development cooperation funding has been playing a decreasing role, funding for development research is expected to become smaller - and hence will likely play a smaller role in development policy. Traditionally, in Vietnam Danida is not a large donor with deep pockets like the World Bank. However, examples exist where even limited investments through development has made a difference, such as the focus on climate change initiated early on, and that has led to increasing numbers of climate change related research projects. Another example is the well-timed project on diabetes ("Living Together with Chronic Disease: Informal Support for Diabetes Management in Vietnam"; details in Annex 1).

With few exceptions, the research findings in Vietnam have some potential for use outside the academic or research sectors, but their relevance for 'development' is not always clear. As illustration, some of the findings are briefly noted in Box 1. These projects, if their findings are applied, can lead to some social, health, economic or environmental changes, but their 'theory of change' in how the results will contribute to 'development' is not always clear.

### Box 1. Selected findings from research supported by Danida in Vietnam, 2008-2018 (project details in Annex 1)

#### Project: Innovative Cleaning Technologies for Production of Drinking Water during Flooding Episodes

Freshwater supply in Vietnam is affected by climate change, in particular floods. When the project was initiated, practices aimed at water purification were unhealthy and often contained pollutants even after treatment. The research results indicated that contaminants in floodwater came from untreated village wastewater, and from pesticides used in agricultural activities. A database on the flood water quality and the effects of flooding on the mobilization of pollutants was developed as prediction and assessment tool to support decision-making of Vietnamese authorities in flood control. A flood water treatment pilot on a mobile and transportable platform was built to produce 1,000 liter of clean water in 24 hours, and a plan for deployment was applied for. The research results were shared with the water treatment company where the experiments were done, but it is not known whether the results were used in practice.

# Improving rice tolerance of submergence and salinity to cope with climate change in coastal areas of Vietnamese Delta

This project was an extension of an earlier phase of work on a related topic, done in conjunction with IRRI in the Philippines when Danish university partners could not be found. It aimed to develop adapted, submergence- and salt-tolerant rice varieties using a particular technique, develop water resource options, and disseminate the results to farmers in two coastal provinces along the two Red River and Mekong River mega deltas, which are hotspots for agricultural losses caused by climate change, in particular through the rise in sea levels. The project was able to incorporate several quantitative trait loci for salinity tolerance and submergence tolerance traits in several rice varieties; progeny of sublines was developed and tested, screened and selected for field trials. The newly developed rice varieties were deployed and disseminated at the national level. Eleven varieties were sent to the National Plant Testing Centre in 2015. Six additional varieties of resistant rice are now complementing two registered at national level, and during interviews the researchers indicated that two more were on the way (it takes 3-4 years to get registration done). The project

also assessed water management and cropping system options for the two targeted provinces. However, according to at least one person interviewed, the project was designed to support poverty reduction in the face of climate change, but the results might not be economically efficient as the rice varieties produced might not be good and could not be sold in other regions because of perceptions of poor quality.

#### REDD+, the forest grab of all times?

The project studied how REDD+ influenced regulations and access to forest resources, the way compensation for foregone benefits was awarded, and to what degree local monitoring of carbon stocks and livelihood impacts of REDD+ could be used as a tool to empower local communities and help secure their rights in the face of REDD+. Results showed that the REDD+ readiness phase had been slow and had fallen short of expectations. The actual practices differed from expectations due to ongoing conflicts over forest and contestations around the meaning of justice. REDD+ efforts and funds were concentrated at the central level; limited funds reached provinces and districts; and ethnic minorities, indigenous peoples and marginalised local communities were largely left out of the design and implementation of REDD+ initiatives. Dwindling donor commitment and the collapse of prices in both the conventional and voluntary carbon markets jeopardized the future of REDD+ as currently constructed, while community-based monitoring of carbon and livelihoods were found to promote local involvement in decision making.

#### Climate Change Impacts on Outbreak of Brown Plant Hopper and Options for Prevention

Climate change is affecting the food security and livelihood of resource-poor farmers in tropical regions. In Vietnam, outbreaks of brown plant hopper have caused catastrophic losses of rice crops. The research results highlighted that these outbreaks were not induced by a change in weather, but by the choice of rice cultivars and the improper use of insecticides. Although a link with climate change was not established, appropriate management of these factors is likely be decisive for management of this pest. A survey in nine provinces over three years also found no incidences of high insecticide resistance indicates that major resistance problems might evolve if current agronomic practices are not altered, with insecticides timed for maximum effect and rotated for different modes of action.

#### The impact of violence on reproductive health in Tanzania and Vietnam

This gender-orientated project aimed to produce new interdisciplinary knowledge about the linkages between sexual and reproductive health and intimate partner violence, with particular emphasis on health sector responses. It was based on the assumption that to advance, intimate partner violence would have to be addressed. Tanzania and Vietnam shared sufficient similarities to make for a comparative approach in studying how cultural norms, social forces and gender relations structure experiences of, and responses to violence. Data generated through the project include detailed epidemiological information about pregnant women's exposure to intimate partner violence and the consequences of violence for women's reproductive health (pre-term birth, low birth weight deliveries, and perinatal depression), as well as ethnographic research on women's experiences and modes of coping with partner violence. A pilot intervention has been initiated, aiming at the provision of informal support for new mothers who experience mental health problems as a consequence of life challenges such as intimate partner violence.

#### Agricultural growth and poverty pockets

The Mekong River Delta has provided for industrialization in Vietnam via strategic coupling between global production networks and resource-rich regions. Especially the region's rice and seafood industries have experienced remarkable growth due to the link with global markets. This project investigated what happens when local rice farmers are encouraged to adopt a new production model and 'internationally recognized good agricultural practices' in order to become part of a global high-value rice production network. Focusing on a project on pangasius cultivation, it was found that the conversion of production practices is not a simple case of local adaption to an international demand, but rather, a complex process of reconfiguration of societal and territorial embeddedness. The conversion of practices was found to rely on local processes of negotiation, on the entrepreneurship of individuals, and on the willingness and ability of farmers to internalize new values. An economic model was developed to explain why poor farmers could not apply pangasius food standards in the sector, while such food standards in the Delta were only beneficial for middle-class farmers. In an empirical study, positive welfare effects were found from participation in contract farming, but not from employment on processor-owned estate farms, indicating that contract farming presents opportunities for economic growth. The team also expanded the concept of strategic coupling to encompass the multi-faceted nature of regional development usually left out in conventional approaches. This was set to be tested in studies of settlement dynamics and household strategies in the Delta.

A mixed picture emerges of the extent to which policies have been influenced, or projects positioned for influence, with lack of experience to do so effectively apparent in some instances. A key intended beneficiary was the Government of Vietnam. Here, too, it was not possible to access sufficient first-hand information to determine whether Danish funding is being seen as of good value to the government. It is often very difficult to establish a link between research funding and policy change. Some of the projects supported by Danida also had less policy relevance than others, and many of the projects focused primarily on the natural sciences with limited potential to impact major development policies. Even good applied and social science research may only have limited relevance to public policy or contemporary policy debates and agendas. Influencing policy through research is also a specialized and time-consuming activity that brings together two very different worlds. One interviewee expressed this as "*the distance from research to policy is too long*".

However, this does not mean that researchers should not aim to position their work for uptake and use, including in the policy arena, and most of the projects studied reported efforts to reach policymakers through the required policy briefs, and through large or small workshops with targeted intended users; usually the projects did not engage policymakers early on in determining priorities or planning and executing the research - something that is known to enhance the uptake of research results. It is of some concern that the evaluation found that most of the policy briefs were inappropriate for effective communication; in the absence of an opportunity to systematically study the records of workshops held, it was not possible to determine their quality.

**Despite these obstacles, there are impressive examples of efforts to influence policy.** The extent of efforts to influence policy depends on each research team, although it is expected to do some dissemination at least after conclusion of the research. An impressive example (although the effect is not known) was the dissemination of findings relevant to the large global community tracking the implementation of REDD+ initiatives under the UNFCCC. The findings were disseminated through various channels, including COP17, and at many international conferences

and meetings. Senior research staff became members of national REDD+ agencies, and technical REDD+ working groups. One senior staff member is an adviser to the President of Indonesia. Several TV programs and YouTube videos were produced to promote project results.

A few key informants in one Ministry and in a research institute close to the government confirmed that at least one long-standing collaboration with Denmark, of which the *Economic Governance and Development in Vietnam and Mozambique* project was part, has had a significant influence on the accessibility of analytical data by government for planning purposes, but "policy influence is weak", as the data were provided in a particular niche somewhat removed from key policy issues. Yet another stakeholder reported that research findings emanating from this project were used for policy and laws, for example on land issues. Each of these instances require in-depth (quasi or non-experimental) impact evaluations to verify the veracity of the claims.

Direct channels for policy advice in Vietnam are limited, including by the embassy, thus reducing the chance of success in influencing policy. While the dissemination of policy advice through workshops and media are useful and necessary, relationships with influential policymakers or their advisors are likely to have greater effect. In the absence of significant activities by the Danish embassy in promoting research, and the lack of formal government channels to do so, researchers' options are limited. Researchers mentioned a few examples of meetings with and by embassy staff to discuss research, but staff turnover and other priorities reduce the potential for success.

# Annex 1. List of Danida-supported projects under evaluation

The following table lists all projects supported in Vietnam during the period of evaluation, as well (i) the projects identified for the limited portfolio analysis (marked with \*), (ii) the projects identified for study in the field (marked with \$), and (iii) those selected for RQ+ (marked with  $\theta$ ).

Title	Project Number	Start Date	End Date	Lead Institution	Partner Institutions	Total Grant (DKK)
FFU Window 1 - North	driven and South driven					
Larger strategic projects	(10 projects)					
Fish borne Zoonotic Parasites in Vietnam	717-LIFE1*	1-01 2008	31-12-2012	University of Copenhagen (UCPH), Faculty of Health and Medical Sciences, Department of Veterinary Disease Biology, Denmark.		8 381 073
Arsenic contamination of groundwater in the Red River Delta in Vietnam, VietAs Phase II	75-08-GEUS*	1-09 2008	30-12-2012	Geological Survey of Denmark and Greenland (GEUS), Denmark.	Hanoi University of Mining and Geology, Vietnam; Hanoi University of Science (HUS), Vietnam.	8 334 000
Economic Governance and Development in Vietnam and Mozambique	85-08-KU* <b>§</b>	1-01 2009	30-12-2012	University of Copenhagen (UCPH), Faculty of Social Sciences, Department of Economics, Denmark.	Central Institute for Economic Management (CIEM), Vietnam; Institute of Labour Science and Social Affairs (ILSSA), Vietnam; National Directorate of Studies and Policy Analysis (DNEAP), Vietnam; National Institute of Statistics (INE), Vietnam.	7 407 013

SUSANE 2 Optimizing environmentally friendly biogas production from livestock manure for the reduction of greenhouse gas emissions	09-076SDU	1-01 2010	31-12-2014	University of Southern Denmark (SDU), Faculty of Engineering, Institute of Chemical Engineering, Biotechnology and Environmental Technology, Denmark	Ministry of Agriculture and Rural Development, Vietnam; Hue University of Agriculture and Forestry, Vietnam; University of Copenhagen (UCPH), Denmark.	6 189 101
Analysis and modelling of Geological Basins in Vietnam - GEUS2 - Phase 3	2201-GEUS2	1-01 2010	30-06-2015	Geological Survey of Denmark and Greenland (GEUS), Denmark.	Vietnam Petroleum Institute (VPI), Vietnam; Hanoi University of Mining and Geology (HUMG), Vietnam; Hanoi University of Science (HUS), Vietnam; University of Copenhagen (UCPH), Faculty of Science, Department of Geosciences and Natural Resource Management, Denmark.	6 388 869
Agricultural growth and poverty pockets (AGROPOP)	10-032LIFE*§	1-01 2011	31-12-2015	University of Copenhagen (UCPH), Faculty of Science, Department of Food and Resource Economics, Denmark.	Southern Horticultural Research Institute, Vietnam; Can Tho University, Vietnam.	8 049 348
Climate Change and Rural Institutions	11-026DIIS*	1-01 2012	31-12-2016	Danish Institute for International Studies (DIIS), Denmark.	Hue University of Agriculture and Forestry, Vietnam; Centre for Climate Change Studies in Central Vietnam, Vietnam; University of Zambia (UNZA), Zambia;	10 124 980

					Makerere University, IWMR Centre, Uganda; Department of Agribusiness and Natural Resource Economics, ForestAction Nepal, Nepal.	
Sustainable production of biogas from waste rice straw (= SubProM project)	11-016AU*	1-04 2012	28-02-2018	Aarhus University (AU), Faculty of Science, Department of Bioscience, Denmark.	College of Environment and Natural Resources, Department of Environmental Science, Can Tho University, Vietnam; Aarhus University (AU), Department of Economics and Business Economics, Denmark.	7 786 920
Interdisciplinary Project on Climate change in Tropical Aquaculture (iAQUA)	12-014AU*§	1-01 2013	31-12-2018	Aarhus University (AU), Denmark.	Can Tho University, College of Aquaculture and Fisheries Institution, Vietnam; University of Southern Denmark (SDU), Department of Biology, Aarhus University (AU) Institut for Klinisk Medicin Faculty of Science, Department of Bioscience	9 098 666
The Impact of Violence on Reproductive Health Tanzania and Vietnam (PAVE)	12-006KU* <b>§</b>	1-01 2013	31-12-2018	University of Copenhagen (UCPH), Faculty of Social Sciences - Department of Anthropology, Denmark.	Kilimanjaro Christian Medical College (KCMC), Tanzania; Hanoi Medical University, Vietnam; University of Southern Denmark (SDU), Denmark;	8 213 291

					The Danish Institute for Health Services Research, Denmark	
Pilot research cooperation	on projects (prior to 20	013) (9 projects)				
Climate change and estuarine ecosystems	P2-08-VIE*	1-01 2009	01-03-2012	Vietnam Academy of Science and Technology (VAST), Institute of Oceanography, Vietnam.	University of Copenhagen (UCPH), Faculty of Science, Department of Biology Department of Biological Sciences, Denmark.	5 499 997
Assessing effects of and responses to climate change on environment and socio-economic development in mid- Central Vietnam	P1-08-VIE <b>§</b>	1-01 2009	01-03-2012	Vietnam Academy of Science and Technology (VAST), Institute of Geography, Vietnam.	University of Copenhagen (UCPH), Faculty of Life Sciences, Department of Disease Biology. Roskilde University (RUC), Department of Society and Globalisation.	4 400 000
Improving rice tolerance of submergence and salinity to cope with climate change in coastal areas of Vietnamese Deltas	09-P01-VIE* <b>\$</b>	1-01 2010	31-01-2013	Agricultural Genetics Institute (AGI), Vietnam.	International Rice Research Institute, The Philippines	4 950 000
Impacts of Climate Change on Land Use Change in the Red River Delta and its Community Livelihood Change	09-P03-VIE	1-01 2010	01-02-2012	Vietnam National University (VNU), College of Science, Vietnam.	Aarhus University (AU), National Environmental Research Institute (NERI), Denmark.	4 950 000
Impacts of climate change and adapting bio-security measures for aquaculture in northern Viet Nam (ICA)	10-P01-VIE	1-12 2011	01-07-2018	Research Institute for Aquaculture No.1 (RIA1), Vietnam.	University of Copenhagen (UCPH), Faculty of Health and Medical Sciences, Department of Veterinary Disease Biology.	4 869 689
Innovative Cleaning Technologies for Production of	10-P04-VIE* <b>§</b>	1-01 2012	31-12-2016	Vietnam Academy of Science and	University of Copenhagen (UCPH),	5 044 998

Drinking Water during Flooding Episodes (A- WATER)				Technology (VAST), Vietnam.	Faculty of Life Sciences, Denmark.	
Better use of nutrition resources for sustaining aquaculture production in Central Vietnam under climate change condition	11-P02-VIE	1-10 2012	30-09-2017	Aquaculture Research Sub-Institute for North Central (ARSINC), Vietnam.	Technical University of Denmark (DTU), National Institute of Aquatic Resources, Denmark.	4 694 767
Climate Change- Induced Water Disaster and Participatory Information System for Vulnerability Reduction in North Central Vietnam	11-P04-VIE*	1-10 2012	31-07-2016	Hanoi University of Science (HUS), Vietnam.	Roskilde University (RUC), Department of Society and Globalisation.	5 094 892
Improving rice tolerance of submergence and salinity to cope with climate change in coastal areas of Vietnamese Deltas	12-P04-VIE*§	1-03 2013	30-07-2017	Agricultural Genetics Institute (AGI), Vietnam.	International Rice Research Institute, The Philippines; Institute Meteorology Hydrology & Environment, Vietnam; Southern Institute for Water Resources Planning (SIWRP), Vietnam.	4 950 000
Research collaboration p	projects in Danida priorit	y countries (1 project)				
REDD+, the forest grab of all times?	13-08KU* <b>§</b>	1-1 2014	30-06-2018	University of Copenhagen (UCPH), Faculty of Science, Department of Food and Resource Economics, Denmark.	Bogor Agricultural University (IPB), Department of Forest Resources Conservation, Indonesia; Hanoi University of Agriculture (HUA), Center for Agricultural Research and Ecological Studies (CARES), Vietnam Academy of Social Sciences,	8 994 436

					Institute of Cultural Studies (ICS), Vietnam; Roskilde University (RUC), Denmark.	
Smaller projects: Initiativ	res (1 project)					
Research initiative on Avian Influenza in Bangladesh and Vietnam	09-093LIFE	13-03 2009	1-01 2010	University of Copenhagen (UCPH), Faculty of Life Sciences (LIFE), Department of Veterinary Disease Biology	Danish Technical University, Denmark; National Institute of Veterinary Research (NIVR), Vietnam; Chittagong Veterinary and Animal Sciences University (CVASU), Bangladesh; Bangladesh; Bangladesh Livestock Research Institute (BLRI), Bangladesh.	200 000
Smaller projects: PhD (7	projects)					
O2 requirements of the air-breathing fishes Pangasius hypophthalmus and Channa striatus	84-08-AU	1-09 2008	1-02 2012	Aarhus University (AU), Faculty of Science, Department of Biological Sciences, Denmark.		1 890 220
Social and Environmental Resilience in Upland Areas of Vietnam. Responses in Land Use and Livelihood Strategies	09-048RUC*	1-09 2009	12-08 2015	Roskilde University (RUC), Department of Society and Globalisation.		2 505 553
Employment generation and labour market regulation: A case study of Viet Nam	09-075KU	1-09 2009	31-8 2013	University of Copenhagen (UCPH), Faculty of Social Sciences, Department of Economics, Denmark.	Ministry of Planning and Investment (MPI), Vietnam Ministry of Labour, Invalids and Social Affairs (MOLISA), Vietnam.	2 213 228
Neonatal Hospital Mortality in South Vietnam	09-082RH*	16-09 2009	1-11 2013	University of Copenhagen (UCPH)/Rigshospitale t, Juliane Marie Centre, Denmark.	Pediatric Hospital No 1, Neonatal Intensive Care Unit, Ho Chi Minh City, Vietnam.	1 901 942
Chickens as a possible reservoir for urinary	09-046LIFE	1-03 2010	1-01 2013	University of Copenhagen (UCPH),	Division of Enteric Diseases, Vietnam;	331 512

tract infections in humans				Faculty of Life Sciences (LIFE), Department of Veterinary Disease Biology, Denmark.	Division of Microbiology, Vietnam.	
Effects of temperature and hypoxia on aerobic scope in the giant freshwater shrimps (Macrobrachium rosenbergii) and (Penaeus monodon)	10-082AU	1-10 2010	31-12-2013	Aarhus University (AU), Faculty of Science Aarhus University (AU), Faculty of Science, Department of Biological Sciences, Denmark.	Can Tho University, Vietnam	2 151 000
Conservation of vulnerable timbers in REDD	11-073LIFE*	1-08 2012	30-11 2016	University of Copenhagen (UCPH), Department of Geosciences and Natural Resource Management, Denmark.	Ministry of Agriculture, Forestry and Fisheries, Cambodia; Vietnam Academy of Agricultural Sciences, Vietnam.	572 830
1,	ctoral Fellows (1 project)					
Life Cycle Assessment in Developing Countries and Governance in Global Value Chains	929-DTU	1-01 2008	1-01 2010	Technical University of Denmark (DTU), Department of Management Engineering, Denmark.		1 501 594
South-driven projects (p	rior to 2017) (1 project)					
Climate Change Impacts on Outbreak of Brown Plant Hopper and Options for Prevention	14-P01-VIE* <b>§</b>	1-06 2014	31-03-2018	Plant Protection Research Institute (PPRI), Vietnam.	Aarhus University (AU), Faculty of Science, Department of Agroecology, Denmark.	4 995 440
FFU - Window 2 (2 proj	ects)					
Health and Antibiotics in Vietnamese Pig Production	17-M06-KU	1-2 2018	31-01-2020	University of Copenhagen (UCPH), Department of Veterinary and Animal Sciences, Denmark.	Danish Agriculture & Food Council; Danish Pig Research Centre; Denmark, University of Copenhagen (UCPH), Faculty of Health and Medical Sciences, Department of Public	4 999 418

					Health, Global Health Section, Denmark; National Institute of Veterinary Research (NIVR), Veterinary Hygiene Department, Vietnam; National Institute of Nutrition (NIM), Department of Food Microbiology and Molecular Biology, Vietnam; International Livestock Research Institute (ILRI), Vietnam. Thai Binh University	4 999 539
Living Together with Chronic Disease: Informal Support for Diabetes Management in Vietnam	17-M09-KU*	1-11 2018	31-10-2021	University of Copenhagen (UCPH), Faculty of Social Sciences, Department of Anthropology.	of Medicine and Pharmacy, Vietnam; University of Southern Denmark (SDU), Research Unit of General Practice, University of Copenhagen (UCPH), Faculty of Health and Medical Sciences, Department of Public Health, Global Health Section; Novo Nordisk A/S, Headquarters, Denmark; Novo Nordisk Hanoi Office, Vietnam.	
Minor studies						
Masters Theses (4 project	cts)					
Marine food web dynamics in Nha Phu estuary, Vietnam		12-02-2012	21-06-2012			14 000
A Methodological Study to a Multifaceted Approach to the Classification of		10-11-2014	12-12-2014			31 000

Recent and Historical Fluvial Structures in the Alluvial Plain of the Red River Delta, Vietnam			
Vulnerabilities and Adaptation to a Changing Climate: A Gender Analysis Conducted in Tra Hat Hamlet, Bac Lieu Province, Vietnam	31-02-2016	30-04-2016	8 500
The effect of hypercapnia on the metabolism and growth in striped catfish (Pangasianodon hypophthalmus)	06-02-2017	05-05-2017	18 000

Note: Two selected projects could not be addressed due to illness of the Vietnamese team member, including one Window 2 project

# **Annex 2. Documents reviewed**

#### General context: Danida

Ministry of Foreign Affairs. 2010. Freedom from Poverty – Freedom to Change (2010): Strategy for Denmark's Cooperation.

Ministry of Foreign Affairs. 14 November 2011. Pilot Research Cooperation Programme (PRCP) on Climate Change in Vietnam - Final Review Report.

Ministry of Foreign Affairs. June 2012. The Right to a Better Life-Strategy for Development Cooperation: Strategy for Denmark's Development Cooperation.

Ministry of Foreign Affairs. April 2013. Evaluation of Danida Supported Research on Agriculture and Natural Resource Management 2006-2011.

Ministry of Foreign Affairs. 2014. Strengthening Research Capacity Strategic Framework for Danish Support for Development Research 2014-2018.

Ministry of Foreign Affairs. November 2015. Review of DFC's Administration of Danida's Support to Development Research.

Ministry of Foreign Affairs. 2017. The World 2030: Denmark's Strategy for Development Cooperation and Humanitarian Action.

#### Project documentation: FFU 2008-2018

Copenhagen: Danida Fellowship Centre; Ministry of Foreign Affairs of Denmark. 2008-2018.

Individual project documentation for Vietnam, with specific reference to the 18 projects used for the limited portfolio analysis, the seven that were the focus for the field visit, and the three used for the RQ+ analysis (where available; project details in Annex 1):

- Applications
- First year reviews
- Midterm reviews
- Project completion reports
- Policy Briefs
- Publication lists
- List of FFU projects 2008-18.

#### Information from the Danida Portal

Information on individual projects by theme, country, and type.

Danida Fellowship Centre. 2019. Danida Research Portal. http://drp.dfcentre.com/ (Accessed between June and December 2019).

#### Literature studied

Nguyen Ngoc Anh, Nguyen Phuong Mai, Doan Quang Hung, Dao Ngoc Tien (2017) The roles of universities in Vietnam's national innovation system: Experiences from the Asia-Pacific, DOI: 10.4324/9781315111421-14 in Universities in the National Innovation Systems, eds. V. V. Krishna, https://www.routledge.com/Universities-in-the-National-Innovation-Systems-Experiences-from-the-Asia-Pacific/Krishna/p/book/9781138213470

Nguyen Ngoc Anh, Michael Braun, Nguyen Phuong Mai, Nguyen Thi Chuc, Ma Doan Hai, (2019), M&E System for Vietnam's Public Research Institute, publish by the Ministry of Science and Technology and the World Bank (in Vietnamese).

Government Office (2013) Decision 339/QD-TTg dated February 19, 2013 by the Prime Minister approving the Master Plan on economic restructuring in association with conversion of the growth model towards improving quality, efficiency and competitiveness during the 2013-2020 period. http://www.chinhphu.vn/portal/page/portal/English/strategies/strategiesdetails?categoryId=30&articleId= 10052090

IMF (2019) Country Focus: Five Charts Explain Vietnam's Economic Outlook July 16, 2019, https://www.imf.org/en/News/Articles/2019/07/11/na071619-five-charts-explain-vietnams-economicoutlook

Ministry of Science and Technology (2012) Science and Technology Strategy 2011 – 2020 <u>https://www.most.gov.vn/en/news/146/The-Strategy-for-Science-and-Technology-Development-for-the-2011-2020-period.aspx</u>

Ministry of Science and Technology (2015) Key Directions, Objectives and Tasks of Science and Technology for the 2016-2020 period <u>https://www.most.gov.vn/en/news/149/key-directions--objectives-and-tasks--of-science-and-technology-for-the-2016-2020-period.aspx</u>

Prime Minister Office (2013) Decision 339/QD-TTg dated February 19, 2013 by the Prime Minister approving the Master Plan on economic restructuring in association with conversion of the growth model towards improving quality, efficiency and competitiveness during the 2013-2020 period. http://www.chinhphu.vn/portal/page/portal/English/strategies/strategiesdetails?categoryId=30&carticleId= 10052090 (Accessed July 2019)

Department of International Cooperation, Ministry of Science and Technology (2017) Vietnam Science and Technology Outlook - 2016, <u>https://www.daad-vietnam.vn/files/2017/03/01EN\_GSD2017\_MOST\_P.B.-Thach\_Vietnam-ST-Outlook.pdf</u>

The World Bank and the Ministry of Planning and Investment of Vietnam (2016) Vietnam 2035: Toward Prosperity, Creativity, Equity, and Democracy, doi: 10.1596/978-1-4648-0824-1 http://vids.mpi.gov.vn/Includes/NewsDetail/12\_2016/dt\_11220161028\_vn2035english.pdf

Edquist, C. (Ed.). (1997). Systems of Innovation: Technologies, Institutions and Organizations. London: Printer.

*Etzkowitz*, H. (2002). The Triple Helix of University-Industry-Government: Implications for Policy and Evaluation. *Working Paper 2002.11*. Retrieved from http://www.sister.nu/pdf/wp\_11.pdf

Etzkowitz, H. (2008). The Triple Helix : University-Industry-Government Innovation in Action. New York ; London: Routledge.

Etzkowitz, H., & Leydesdorff, L. (1995). The Triple Helix---University-Industry-Government Relations: A Laboratory for Knowledge-Based Economic Development. EASST Review, 14, 14-19.

Etzkowitz, H., & Leydesdorff, L. (Eds.). (1997). Universities and the Global Knowledge Economy: A Triple Helix of University-Industry-Government Relations. London: Printer.

Hien, P. D. (2010). A comparative study of research capabilities of East Asian countries and implications for Vietnam. Higher Education, 60, 615-625.

Kozel, Valerie. 2014. Well Begun but Not Yet Done: Progress and Emerging Challenges for Poverty Reduction in Vietnam.Washington, DC: World Bank. doi:10.1596/978-0-4648-0006-1. License: Creative Commons Attribution CC BY 3.0 IGO

Kumaresan, N., & Miyazaki, K. (1999). An Integrated Network Approach to Systems of Innovation--the Case of Robotics in Japan. *Research Policy*, 28(6), 563-585. doi: Doi: 10.1016/s0048-7333(98)00128-0

Lundvall, B.-Å. (1992). National Systems of Innovation : Towards a Theory of Innovation and Interactive Learning. London

Mowery, D. C., & Sampat, B. N. (2004). Universities in National Innovation Systems. In J. Fagerberg, D. C. Mowery & R. R. Nelson (Eds.), *The Oxford Handbook of Innovation* (pp. 209-239). Oxford and New York: Oxford University Press.

Nelson, R. (1993). National Systems of Innovation: A Comparative Study. Oxford: Oxford University Press.

Nguyen Ngoc Anh & Nguyen Thang & Le Dang Trung & Ngoc Quang Pham & Chuc Dinh Nguyen & Nhat Duc Nguyen. (2007). Foreign Direct Investment in Vietnam: Is There Any Evidence Of Technological Spillover Effects. Working Papers 18, DEPOCEN, Retrieved from http://depocenwp.org/modules/download/index.php?id=36

Nguyen Anh Ngoc & Ngoc Quang Pham & Chuc Dinh Nguyen & Nhat Duc Nguyen, (2008). "Innovation and exports in Vietnam's SME sector," European Journal of Development Research, Taylor and Francis Journals, vol. 20(2), pages 262-280.

Nguyen Ngoc Anh, Nguyen Duc Nhat, Nguyen Dinh Chuc and Nguyen Thang. (2011). Surprising resilience but challenges ahead, in The Great Recession and Developing Countries: Economic Impact and Growth Prospects, pp 545-595, (eds) Mustapha K. Nabli, The Work Bank.

Nguyen Ngoc Anh, Doan Quang Hung, and Nguyen Thi Phuong Mai (2013) The Vietnam national innovation system: A diagnostic review, TECH MONITOR, Apr-Jun 2013, pp. 42-52.

Marea Fatseas. (2010). Research–Industry Cooperation Supporting Development in Vietnam: The Challengeof Translating Policy into Practice, in Reforming Higher Education in Vietnam: Challenges and Priorities, pp 103-115, (eds) Grant Harman, Martin Hayden, Pham Thanh Nghi, Springer.

OECD. (1999). Managing National Innovation Systems. Paris: OECD.

Tran Ngoc Ca. (2006). Universities as drivers of the urban economies in Asia : the case of Vietnam. Policy, Research working paper ; no. WPS 3949. Washington, DC: World Bank. http://documents.worldbank.org/curated/en/2006/06/6871790/universities-drivers-urban-economies-asia-case-vietnam

Tran Ngoc Ca and Nguyen Vo Hung. (2011). Vietnam: Current Debates on the Transformation of Academic Institutions, in Universities in Transition, pp 119-142, (eds) Bo Göransson and Claes Brundenius, Springer.

Vietnam Academy of Social Sciences (2011) Poverty Reduction in Vietnam: Achievements and Challenges, http://en.vass.gov.vn/noidung/anpham/Lists/SachToanVan/Attachments/23/Poverty\_Assessment.pdf

# Annex 3. Stakeholder map

Stakeholder	Role in development research (period of involvement )	Targeted grouping(s)		
Stakeholders ba	sed in the North			
Managing/adm	inistering development research in Denmark			
EVAL & MFA / Danida	2016-Today Provides strategic direction for development research	Head of Evaluation & Research Official responsible for BSU, Evaluation and Research Official responsible for FFU, Evaluation and Research		
DFC	2008-Today Administers the Danida support to development research - the entire project cycle from announcements of annual calls to completion of the research projects	Senior and key representatives		
Research Institu	utions			
Copenhagen University	Receive funding from Danida for selected research projects (through FFU and BSU)	<u>Vietnam case study</u> Project coordinators, research staff and/or PhD students		
Århus University	Receive funding from Danida for selected research projects (through FFU and BSU)	<u>Vietnam case study</u> Project coordinators, research staff and/or PhD students		
Other universities	Bogor Agricultural University	<u>Vietnam case study</u> Project coordinators, research staff and/or PhD students		
	Kilimanjaro Christian Medical College (KCMC), Tanzania	<u>Vietnam case study</u> Project coordinators, research staff and/or PhD students		
Stakeholders ba	sed in the South			
Danish Embass	sies			
Vietnam	Manage Danish bilateral assistance, Provides input to the FFU regarding the relevance of the development research applications for Danish development assistance	Relevant counsellors, Embassy of Denmark in Vietnam		
Research Institu	utions			
Vietnam	Receive funding from Danida, and/or key actor in the national system of innovation: Central Institute for Economic Management (CIEM) Vietnam Academy of Science and Technology (VAST) Vietnam Academy of Agricultural Science Vietnam National University of Agriculture Plant Protection Research Institute (PPRI) Hanoi Medical University Vietnam Academy of Social Sciences (VASS)	Senior management representative, project coordinators, research staff and/or PhD students		

Ministries/P	Ministries/Policymakers						
	Ministry of Labour - Invalids and Social Affairs (MOLISA)	Senior management representative					
Vietnam	Ministry of Agriculture and Rural Development (MARD)	Senior management representative					
	Ministry of Planning and Investment	Senior management representative					

# Annex 4. List of persons interviewed

Title	Name	Surname	Position	Unit	Organisation	City	Country
Ms	Nguyen Tue	Anh	Acting President	N/a	Central Institute for Economic Management (CIEM)	Hanoi	Vietnam
Prof	Mark	Bayley	Project Coordinator	Department of Bioscience	Aarhus University	Aarhus	Denmark
-	Le Nguyen	Binh	Deputy Director-General	Institute of Labour and Social Affairs (ILSSA)	Ministry of Labour - Invalids and Social Affairs (MOLISA)	Hanoi	Vietnam
Mr	Trinh Duc	Chieu	Deputy Director	Department for Enterprise Reform and Development	Central Institute for Economic Management (CIEM)	Hanoi	Vietnam
Dr	Christian	Damsgaard	PhD student	1	Aarhus University	Aarhus	Denmark
Mr	Nguyen Anh	Duong	Director	Department of General Economic Issues and Integration Studies	Central Institute for Economic Management (CIEM)	Hanoi	Vietnam
Prof	Niels	Fold	Research Partner	Department of Geosciences and Natural Resource Management	University of Copenhagen	Copenhagen	Denmark
Prof	Tine Mette	Gammeltoft	Project Coordinator	Department of Anthropology	University of Copenhagen	Copenhagen	Denmark
Ms	Trinh Thu	Hà	Staff/PhD student	Institute of Chemistry	Vietnam Academy of Science and Technology (VAST)	Hanoi	Vietnam
Prof	Le Huy	Ham	Chairman / former Director General	Science Council / Agricultural Genetics Institute	Vietnam Academy of Agricultural Science	Hanoi	Vietnam
Mr	-	Han	-	Institute of Chemistry	Vietnam Academy of Science and Technology (VAST)	Hanoi	Vietnam
Ms	Nguyen Thu	Hang	Official	International Cooperation Department	Ministry of Agriculture and Rural Development (MARD)	Hanoi	Vietnam
Dr	Nguyen Thanh	Hoan	Head, Environmental Information Study and Analysis Department	Institute of Geography	Vietnam Academy of Science and Technology	Hanoi	Vietnam
Dr	Dao Bach	Khoa	Head	Department of Pesticides, Weeds and Environment	Plant Protection Research Institute (PPRI)	Hanoi	Vietnam
Prof	Nguyen Thanh	Lam	Vice Dean	Faculty of Environment	Vietnam National University of Agriculture	Hanoi	Vietnam
Dr	Nguyen Hai	Nui	Staff	Faculty of Environment	Vietnam National University of Agriculture	Hanoi	Vietnam
Dr	Cao Truong	Son	Staff	Faculty of Environment	Vietnam National University of Agriculture	Hanoi	Vietnam
Prof	Le Hung	Linh	Head, Molecular Biology Department	Agricultural Genetics Institute	Vietnam Academy of Agricultural Science	Hanoi	Vietnam

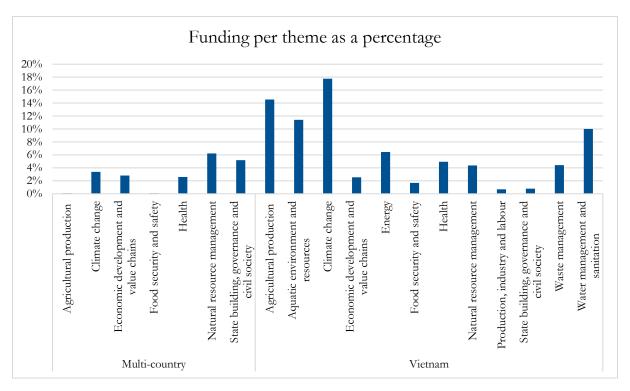
Mr	Mikkel	Lyndrup	Counsellor	N/a	Embassy of Denmark	Hanoi	Vietnam
Dr	Dyah	Mardiyaningsih	PhD student	-	Bogor Agricultural University	Bogor	Indonesia
Prof	Dang Vung	Nguyen	Head, Department of Demography	School of Preventative Medicine and Public Health	Hanoi Medical University	Hanoi	Vietnam
Prof	Thi Thuy Hanh	Nguyen	Vice Head / Head of Training, Scientific Management and International Cooperation Department, Department of Demography	School of Preventative Medicine and Public Health	Hanoi Medical University	Hanoi	Vietnam
Dr	Nguyen Hoang	Thanh	Staff, Department of Postgraduate Training	School of Preventative Medicine and Public Health	Hanoi Medical University	Hanoi	Vietnam
Ms	Hai Ninh	Nguyen	Deputy Director	Institute of Labour and Social Affairs (ILSSA)	Ministry of Labour - Invalids and Social Affairs (MOLISA)	Hanoi	Vietnam
Dr	Tran Tho	Nhi	Staff/PhD	School of Preventative Medicine and Public Health	Hanoi Medical University	Hanoi	Vietnam
Mr	Henrik	Njorth	Counsellor	N/a	Embassy	Hanoi	Vietnam
Dr	Hao	Phan	PhD student	-	-	Norfolk	Vietnam
Dr	Adisti Permatasari	Putri	PhD student	-	Bogor Agricultural University	Bogor	Indonesia
Dr	Yanto	Rochmayanto	PhD student	-	Bogor Agricultural University	Bogor	Indonesia
Dr	Geoffrey	Sigalla	PhD student	-			
Prof	Finn	Tarp	Project Coordinator	Department of Economics	University of Copenhagen	Copenhagen	Denmark
Mr	Bui Xuan	Thang	Staff	Department of Pesticides, Weeds and Environment	Plant Protection Research Institute (PPRI)	Hanoi	Vietnam
Dr	Tran Toan	Thang	Director	Global Macroeconomy Department	National Centre for Socioeconomic Forecasting	Hanoi	Vietnam
Prof	Ida	Theilade	Project Coordinator	Department of Food and Resource Economics	University of Copenhagen	Copenhagen	Denmark
Prof	Mai Trong	Thông	Retired	Institute of Geography	Vietnam Academy of Science and Technology	Hanoi	Vietnam
Dr	Nguyen Do Anh	Tuan	Director General / former President	International Cooperation Department	Ministry of Agriculture and Rural Development (MARD) / Institute of Policy and Strategy for Agriculture and Rural Development (IPSARD)	Hanoi	Vietnam
Dr	Nerea	Turreira Garcia	PhD student	Department of Food and Resource Economics;	University of Copenhagen;	Copenhagen	Denmark
Prof	Pham Quoc	Vinh	Vice Director	Institute of Geography	Vietnam Academy of Science and Technology	Hanoi	Vietnam

Dr	Dao Quang	Vinh	Director-General	Institute of Labour and Social	Ministry of Labour - Invalids and	Hanoi	Vietnam
	·			Affairs (ILSSA)	Social Affairs (MOLISA)		

# Annex 5. Projects and distribution of funding by theme

Theme by single and multi-country projects	Number of projects	Funding (%)	DKK
Agricultural production	11	14,62%	46 180 642
Multi-country Asia	1	0,06%	200 000
Vietnam	10	14,55%	45 980 642
Aquatic environment and resources	7	11,42%	36 083 340
Vietnam	7	11,42%	36 083 340
Climate change	13	21,14%	66 801 812
Multi-country Asia	1	0,18%	572 830
Multi-country International	1	3,20%	10 124 980
Vietnam	11	17,76%	56 104 002
Economic development and value chains	3	5,37%	16 957 955
Multi-country Asia	1	0,48%	1 501 594
Multi-country International	1	2,34%	7 407 013
Vietnam	1	2,55%	8 049 348
Energy	3	6,45%	20 364 890
Vietnam	3	6,45%	20 364 890
Food security and safety	3	1,75%	5 530 930
Multi-country Asia	1	0,06%	200 000
Vietnam	2	1,69%	5 330 930
Health	5	7,54%	23 827 357
Multi-country International	1	2,60%	8 213 291
Vietnam	4	4,94%	15 614 066
Natural resource management	6	10,61%	33 536 668
Multi-country Asia	2	3,03%	9 567 266
Multi-country International	1	3,20%	10 124 980
Vietnam	3	4,38%	13 844 422
Production, industry and labour	1	0,70%	2 213 228
Vietnam	1	0,70%	2 213 228
State building, governance and civil society	3	5,98%	18 907 002
Multi-country Asia	1	2,85%	8 994 436
Multi-country International	1	2,34%	7 407 013
Vietnam	1	0,79%	2 505 553
Waste management	2	4,42%	13 976 021
Vietnam	2	4,42%	13 976 021
Water management and sanitation	5	9,99%	31 579 760
Vietnam	5	9,99%	31 579 760
Grand Total	62	100,00%	315 959 605

\*Does not include Master theses. Projects made be counted more than once as those with multiple themes were recorded once per each theme.



\*Does not include Master theses. Projects made be counted more than once as those with multiple themes were recorded once per theme. Multi- country projects merged for easier readability.

# Annex 6. Lead institutions for projects in Vietnam

Lead Institution for projects in Vietnam	Number of projects	DKK
Aarhus University (AU), Denmark	4	20 926 806
Aarhus University (AU), Denmark, department unspecified	1	9 098 666
Aarhus University (AU), Denmark, Faculty of Science, Department of Biological Sciences,	2	4 041 220
Aarhus University (AU), Denmark, Faculty of Science, Department of Bioscience,	1	7 786 920
Agricultural Genetics Institute (AGI), Vietnam	2	9 900 000
Aquaculture Research Sub-Institute for North Central (ARSINC), Vietnam	1	4 694 767
Danish Institute for International Studies (DIIS), Denmark	1	10 124 980
Geological Survey of Denmark and Greenland (GEUS), Denmark	2	14 722 869
Hanoi University of Science (HUS), Vietnam	1	5 094 892
Plant Protection Research Institute (PPRI), Vietnam	1	4 995 440
Research Institute for Aquaculture No.1 (RIA1), Vietnam	1	4 869 689
Roskilde University (RUC), Denmark Roskilde University (RUC), Department of Society and Globalisation	1	2 505 553
Technical University of Denmark (DTU), Denmark Technical University of		
Denmark (DTU), Department of Management Engineering	1	1 501 594
University of Copenhagen (UCPH), Denmark	10	54 361 688
University of Copenhagen (UCPH), Denmark, Department of Geosciences and Natural Resource Management	1	572 830
University of Copenhagen (UCPH), Denmark, Faculty of Health and Medical Sciences, Department of Veterinary and Animal Sciences	1	4 999 418
University of Copenhagen (UCPH), Denmark, Faculty of Health and Medical Sciences, Department of Veterinary Disease Biology, Denmark	1	8 381 073
University of Copenhagen (UCPH), Denmark, Faculty of Life Sciences (LIFE), Department of Veterinary Disease Biology	2	531 512
University of Copenhagen (UCPH), Denmark, Faculty of Science, Department of Food and Resource Economics	1	17 043 784
University of Copenhagen (UCPH), Denmark, Faculty of Social Sciences, Department of Antropology	2	13 212 830
University of Copenhagen (UCPH), Denmark, Faculty of Social Sciences, Department of Economics	2	9 620 241
University of Copenhagen (UCPH)/Rigshospitalet, Denmark, Juliane Marie Centre	1	1 901 942
University of Southern Denmark (SDU), Denmark, Faculty of Engineering, Institute of Chemical Engineering, Biotechnology and Environmental		
Technology	1	6 189 101
Vietnam Academy of Science and Technology (VAST), Vietnam	3	14 944 995
Vietnam Academy of Science and Technology (VAST), Vietnam - Vietnam Academy of Science and Technology (VAST), Institute of Geography	1	4 400 000
Vietnam Academy of Science and Technology (VAST), Vietnam - Vietnam Academy of Science and Technology (VAST), Institute of Oceanography	1	5 499 997
Vietnam Academy of Science and Technology (VAST), Vietnam, department unspecified	1	5 044 998
Vietnam National University (VNU), Hanoi, Vietnam, College of Science	1	4 950 000
Unspecified	4	71 500
Grand Total	36	161 755 816