

## Light-touch Baseline Narrative Reporting Document (November 2010)

In lieu of the full baseline data collection exercise taking place, please complete the following reporting document. One overarching document for the whole consortium is preferred. However, if it is easier, we are happy to also accept one form per consortium partner.

While the document predominately uses a narrative reporting format, we have also included space for inclusion of any quantitative data that may be available. Please try to include as much quantitative data as possible.

In addition, the final part of the form requests publication and grants data relating to co-applicants (named personnel within the original bid document). These are vital for successful review of the progress of the African Institutions Initiative and we request that you provide as much data here as possible.

Any queries regarding the forms should be sent to: [r.e.hanlin@open.ac.uk](mailto:r.e.hanlin@open.ac.uk)

Please endeavour to return the completed form(s) to us by **30<sup>th</sup> November 2010**.

### PART A: Capacity baseline

**1. What was the situation with respect to scientific/ research related human resources capacity (research active staff, post-grads) within your relevant field of activity in your African partner institutions at baseline (September 2009)?**

**Narrative report:**

Among the SNOWS partners University of Copenhagen primarily had research cooperation with KNUST at baseline. Its probably fair to say that the main research activities are driven by PhDs, as academic staff are preoccupied with lecturing and administrative work. The PhDs are often junior staff undertaking their PhD while maintaining a considerable workload related to teaching and admin support.

**Any additional supporting quantitative data:**

**2. What relevant training courses/ programmes (for post-graduate teaching in particular, but also professional development) were available within the partner institutions at baseline (September 2009)? Please distinguish between courses/ programmes available in Northern institutions and African institutions if possible.**

**Narrative report:**

At University of Copenhagen most relevant course would be found through at School of Global Health; the Water Research Initiative (VIVA), and RECETO, a PhD Programme of Environmental Chemistry, Microbiology and Toxicology. Selected courses and programmes are mentioned below under the "additional supporting quantitative data" field.

In addition to the courses and study programmes available through these research schools, there are several research methodology courses targeting MSc and PhD students. These are not listed below

In addition to courses and programmes for research training, there are numerous staff training

courses targeted senior staff as well as junior staff /PhDs. These are not listed below.

**Any additional supporting quantitative data:**

**University of Copenhagen/School of Global Health**

Full study programmes such as:

Master of International Health  
Master in Parasitology  
Master of Disaster Management  
Master of Public Health  
Master of Anthropology of Health  
MA in African Studies

**Several MSc and PhD courses are relevant, including International health courses**

- Health and Disease in Low and Middle Income Communities
- Research Design
- Health Care Systems in Low and Middle Income Societies
- HIV/AIDS - Prevention, Care, Treatment and Advocacy
- HIV-Related Diseases, Treatment and Care
- Non-Communicable Diseases
- Health in Emergencies and Refugee Health

**Human nutrition courses**

- International Nutrition and Health

**HIV courses**

- HIV-Related Diseases, Treatment and Care

**Disaster management courses**

- Introduction and Research Methodologies
- Disaster Risk Reduction
- Disaster Response
- Disaster Recovery
- Research Design
- Risk Assessment Methods
- Risk Reduction and Preparedness
- Disaster Response Management
- Geo Information in Disaster Situations
- Health in Emergencies and Refugee Health
- Water Supply & Sanitation in Emergencies
- Sustainable Recovery and Climate Change Adaptation

**Antropology courses**

- Overview of courses within medical anthropology, anthropology of migration, etc.

**Summer schools**

- Summer School in Mental Health in a Global Perspective
- Summer School in International Health
- Summer School in Global Health Challenges

**University of Copenhagen/The Water Research Initiative VIVA**

ViVa contributes to the master programme EnvEuro.

EnvEuro is a two-year Master in Environmental Science, offered by 4 leading European universities.

The master is focused on soil, water and biodiversity. It features an introduction to environmental science, 6 different specialisations, and finally a masters thesis in environmental science.

#### University of Copenhagen/Faculty of Life Sciences

Agrohydrology and Bioclimatology (PhD)

Applied Ecology (MSc) - Block 2

Applied Microbiology (MSc) - Block 2

Land Use, Element Balances and Environmental Impact (joint MSc and BSc) - Block 3

Climate, Weather and Plants (joint MSc and BSc) - Block 1

Crop Production in the Tropical Environment (MSc) - Block 4

Environmental and Ecotechnology (joint MSc and BSc) - Block 3

Environmental Management in Europe (MSc) - Block 2

Environmental Soil Chemistry & Biotechnology (MSc) - Block 1

Land Resources and Crop Production in the Tropics (joint MSc and BSc) - Block 1 & 2

Urban Ecosystems: Structures, Functions and Designs (MSc) - Block 1

#### University of Copenhagen/Faculty of Pharmaceutical Sciences

Aquatic Environmental Chemistry (MSc)

#### University of Copenhagen/Faculty of Science

Loading, Transport and Modelling of Pollutants in Aquatic Environments (**joint MSc and BSc**)

#### **University of Copenhagen / RECETO- PhD Programme of Environmental Chemistry, Microbiology and Toxicology**

PhD courses (examples from 2009-10):

Remediation of Contaminated Soils

New Understanding of Water Flow in the Unsaturated Zone

Special Topics in Ecotoxicology 2010

Research Ethics for Scientists and Engineers in the 21st Century

Merging Measurements and Modeling in Soil Physics

PhD Press course

Scientific writing - Techniques for writing and presenting scientific papers

Innovation and intellectual property rights in biotechnology

Post Doc Application Workshop

Supervision Course for PhD Supervisors and their Students

Project Management

Philosophy of Science and research ethics

Generic PhD Courses: Introduction course. Expectations as a PhD student at LIFE

Risk assessment in the laboratory

Food, medicine and philosophy in East and West

Global Writing for Scientific Staff at LIFE

Biophysical Chemistry

Analytical Chemistry

Advanced Chemometrics

Infection microbiology

Pesticide Use, Mode of Action and Ecotoxicology

Microbial growth and Activity in Complex Communities

Applied Microbiology

Advanced Mathematics for Biology

Advanced statistics

Applied Statistics

Biochemistry and Natural Product Chemistry  
 Combinatorial chemistry and chemical biology  
 Environmental Soil Chemistry  
 Pedology  
 IPR and Patenting  
 Phosphorus in Wetlands - biogeochemistry, modelling and management  
 Soil Mineral Determination  
 Topics and Methods in Inorganic Chemistry  
 Advances in Plant Nutrition  
 Agrohydrology and Bioclimatology  
 Plant Nutrients in Terrestrial Ecosystems - acquisition and turnover  
 Uptake and effects of xenobiotics in plants

RECETO Summer school - Bioactive natural compounds in soil; Analysis, fate and effects  
 Chemometrics for Environmental Science II - Handling excitation-emission fluorescence spectroscopy- and chromatographic mass spectrometry data

**3. What was the situation with respect to research management, governance and administration structures within your relevant field of activity in your African partner institutions at baseline (September 2009)?**

**Narrative report:**

**University of Copenhagen organises several annual courses in project management and administration, financial management etc in partner institutions in Africa.**

**Any additional supporting quantitative data:**

**4. What was the situation with respect to physical and ICT infrastructure within your relevant field of activity in your African partner institutions at baseline (September 2009)? Where any additional facilities based within Northern partner institutions regularly used by African partner institutions at baseline?**

**Narrative report:**

**Core African partners participate in running IT based e-learning courses.**

**Any additional supporting quantitative data:**

**PART B: Publication and grants situation**

Please provide the following as additional annexes to this report:

- A list of co-applicants' publications (for the last 10 years). Data should relate to both African and Northern institutions.

### Anders Dalsgaard's publications since 2000:

- Petersen, A. Guardabassi, L., Dalsgaard, A. and Olsen, E.J. 2000. Class I integrons containing a *dhfrI* gene cassette in aquatic *Acinetobacter* spp. isolated from a Danish fresh water trout farm. FEMS Microbiol.Lett., 182:73-76.
- Dalsgaard\*, A., Forslund, A., Serichantalergs, O., and Sandvang, D. 2000. Distribution and content of class I integrons in different *Vibrio cholerae* O-serotype strains isolated in Thailand. Antimicrobiol. Agents Chemother., 44:1315-1321.
- Dalsgaard\*, A., Forslund, F., Petersen, A., Brown, D.J., Dias, F., Monteiro, S., Mølbak, K., Aaby, P., Rodrigues, A., and Sandström, A. 2000. Class I integron-borne, multiple-antibiotic resistance encoded by a 150-kb conjugative plasmid in epidemic *Vibrio cholerae* O1 strains isolated in Guinea-Bissau, J.Clin.Microbiol., 38:3774-3779. Appendix 3-4.
- Lewin, A., Bert, B., Dalsgaard, A., Appel B., and Høi, L.. 2000. A highly homologous 68 kpb plasmid found in *Vibrio vulnificus* strains virulent for eels. J. Basic Microbiol., 40:377-384.
- Guardabassi, L., Dalsgaard, A., Raffatellu, M., and Olsen, J.E. 2000. Increase in the prevalence of oxolinic acid resistant *Acinetobacter* spp. in a stream receiving the effluent from a freshwater trout farm following the treatment with oxolinic acid-medicated feed. Aquaculture., 88:205-218.
- Guardabassi, L., Dijkshoorn, L., Olsen, J.E., and Dalsgaard, A. 2000. Distribution of tetracycline resistance determinants A to E and transfer *in vitro* of tetracycline resistance in clinical and aquatic *Acinetobacter* strains. J.Med. Microbiol., 49:929-936.
- Dalsgaard\*, A., Forslund, A., Hesselbjerg, A. and Bruun, B. 2000. Clinical manifestations and characterization of extra-intestinal *Vibrio cholerae* non-O1, non-O139 infections in Denmark. Clin.Microbiol.Infect.,6: 619-627.
- Høi, L. and Dalsgaard, A. 2000. Evaluation of a simplified semi-quantitative protocol for the estimation of *Vibrio vulnificus* in bathing water using cellobiose-colistin agar; a collaborative study with 13 municipal food control units in Denmark. J.Microbiol.Met., 41:53-57.
- Dalsgaard\*, A., Serichantalergs, O., Forslund, A., Lin, W., Mekalanos, J., Mintz, E., Shimada, T. and Wells, J.G. 2001. Clinical and environmental isolates of *Vibrio cholerae* serogroup O141 carry the CTX phage and the genes encoding the toxin-coregulated pili.. J.Clin.Microbiol., 39:4086-4092. Appendix 3-5.
- Jensen, P.K., Aalbæk, B., Aslam, R., and Dalsgaard, A. 2001. Specificity for field enumeration of *Escherichia coli* in tropical surface waters J.Microbiol.Met., 45:135-141.
- Dalsgaard\*, A., Forslund, A., Sandvang, D., Arntzen, L. and Keddy, K. 2001. *Vibrio cholerae* O1 outbreak strains in Mozambique and South Africa in 1998 are multiple drug-resistant, contain the SXT element and the *aadA2* gene located on class 1 integrons. J.Antimicrob.Chemoth., 48:827-838.
- Van Anh, N.T., Cam, P.D. Dalsgaard\*, A. 2001. Antimicrobial resistance of *Shigella* spp. isolated from diarrheal patients between 1989 and 1998 in Viet Nam. South-east Asian Journal of Tropical Medicine and Hygiene, 32:856-862.
- Guardabassi, L., Lo fo Wong, D.M.A., Dalsgaard, A. 2002. The effects of advanced wastewater treatment on the prevalence of antimicrobial resistant bacteria. Water Research, 36:1955-1964.

- Jensen, K.J., Ensink, J., Jayasinghe, G., van er Hoek, W., Cairncross, S., and Dalsgaard, A. 2002. Domestic transmission routes of pathogens; the problem of in-house contamination of drinking water during storage in developing countries, *Trop.Med.Int.Health*, 7:604-609. Appendix 3-6.
- Guardabassi, L., Gravesen, J., Lund, C., Bagge, L., and Dalsgaard, A. 2002. Delayed incubation as an alternative method to sample storage for the enumeration of *E. coli* and culturable bacteria in water. *Water Research*, 36: 4655-4658
- Dalsgaard, A, Mazur, J., and Dalsgaard, I. 2002. Misidentification of *Vibrio cholerae* O155 isolated from imported shrimp as O-serogroup O139 due to cross-agglutination with commercial O139 antisera. *J.Food Protect.*, 65-670-672.
- Guardabassi, L., Brøndum, P.T., Danø, R., Forslund, A, and Dalsgaard, A. 2002. Dissemination of vancomycin-resistant enterococci harboring *vanA* through disposal of wastefrom vancomycin production. *Microbial.Drug Resist.*, 8:401-406.
- Pedersen, A., Andersen, J.S., Kaewmak, T., Temdung, S., and Dalsgaard, A. 2002. Impact of integrated fish farming on antimicrobial resistance in the pond environment. *Appl.Environm.Microbiol.*, 68: 6036-6042. Appendix 3-7.
- Dalsgaard, A. 2002. *Vibrio vulnificus*. *Culture*, 23:5-8.
- Jensen, P.K., Ensink, J.H.J., Jayasinghe, G., van der Hoek, W., Cairncross, S, and Dalsgaard, A. 2003. Effect of chlorination of drinking-water on water quality and childhood diarrhoea in a village in Pakistan. *Journal of Health, Population and Nutrition*, 21: 26-31.
- Iversen, J.B., Sandvand, D., Srijan, A., Cam, P.D., and Dalsgaard, A. 2003. Characterization of antimicrobial resistance, plasmids and gene cassettes in *Shigella* spp. from patients in Viet Nam. *Microbial Drug Resist.*, 9: 17-24.
- DePaola, A., Nordstrom, J.L., Dalsgaard, A., Forslund, A., Oliver, J., Bates, T. Bourdage, K.L., and Gulig, P.A. 2003. Analysis of *Vibrio vulnificus* from market oysters and septicemia cases for virulence markers, *Appl.Environm.Microbiol.*, 69: 4006-4011.
- Pedersen, A., and Dalsgaard, A. 2003. Antimicrobial resistance of intestinal *Aeromonas* spp. and *Enterococcus* spp. in fish cultured in integrated broiler-fish farms in Thailand. *Aquaculture*, 219: 71-82.
- Pedersen, A., and Dalsgaard, A. 2003. Species composition and antimicrobial resistance genes of *Enterococcus* spp., isolated from integrated and traditional fish farms in *Environm.Microbiol.* 5: 395-402.
- De, N.V., Murrell, K.D., Cong, L.D., Cam, P.D., Chau, L.V., Toan, N.D., and Dalsgaard\*, A. 2003. The food-borne trematode zoonoses of Vietnam. *South-east Asia J.Trop.Health.Med.Pub.Health.*, 34 (Suppl 1): 12-35.
- Willingham, A.L. III, De, N.V., Doanh, N.Q., Cong, L.D., Dung, T.V., Dorny, P., Cam, P.D., and Dalsgaard\*, A. 2003. Current status of cysticercosis in Vietnam. *South-east Asia J.Trop.Health.Med.Pub.Health.*, 34 (Suppl 1):35-50.
- Guardabassi, L. and Dalsgaard, A.. 2004. Occurrence, structure, and mobility of Tn1546-like elements in environmental isolates of vancomycin-resistant enterococci.

Appl.Environm.Microbiol., 70: 984-990.

Jensen, P.K., Jayasinghe, G., van der Hoek, W., Cairncross, S, and Dalsgaard, A. 2004. Is there an association between bacteriological water quality and childhood diarrhoea in rural areas in developing countries?. *Trop.Med.Int.Health*, 9: 1210-15. Appendix 3-8.

Guardabassi, L., Christensen, H., Hasman, H., and Dalsgaard, A. 2004. Members of the genera *Paenibacillus* and *Rhodococcus* harbor genes homologous to enterococcal glycopeptide resistance genes *vanA* and *vanB*. *Antimicrob. Agents Chemotherap.*, 48: 4915-4918.

van der Hoek, W., Anh, V.T., Cam, P.D., Vicheth, C., and Dalsgaard, A. 2005. Skin diseases among people occupationally exposed to urban wastewater. *Urban Agriculture Magazine* no 14, p. 30-31.

Jensen, A.N., Andersen, M.T., Dalsgaard, A., Baggesen, D.L. and Nielsen, E.M. 2005. Development of real-time PCR and hybridization methods for detection of thermophilic *Campylobacter* spp. in pig faecal samples, *J.Appl.Microbiol*, 99: 292-300.

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Jensen, P.K., Phuc, P.D., Dalsgaard, A and Konradsen, F. 2005. Successful sanitation promotion must recognize the use of latrine wastes in agriculture – the example of Vietnam. *WHO Bulletin*, 83: 273-274.

Jensen, A.N., Dalsgaard, A., Nielsen, E.M., D. L. Baggesen. 2006. Transmission and survival of *Salmonella* Typhimurium in outdoor organic pig farming. *Applied Environm.Microbiol.*, 72: 1833-1842.

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in retail markets. *J. Water and Health*, 5: 209-218.

Thu, N.D., Dalsgaard, A., Ly, T.T.L. and K.D. Murrel. 2007. Prevalence of zoonotic liver and intestinal metacercariae (Digenea) in cultured and wild fish of southern Vietnam. *Korean Journal of Parasitology*, 45 (1): 45-54.

Trang, D.T., Mølbak, K., Cam, P.D., and Dalsgaard, A. 2007. Incidence and risk factors of skin ailments among farmers working with wastewater-fed agriculture in Hanoi, Vietnam. *Transactions of the Royal Society of Tropical Medicine and Hygiene*, 101 (5): 502-510.

Tønner-Klank, T., Møller, J., Forslund, A., Dalsgaard, A. 2007. Microbiological assessments of compost toilets: in-situ measurements and laboratory studies of the survival of fecal microbial indicators using sentinel chambers. *Waste Management*, 27: 1144-1154.

Serichantalergs, O., Jensen, L.B., Pitarangsi, J., Mason, C.J., and A. Dalsgaard. 2007. A possible mechanism of macrolide resistance among multiple resistant *Campylobacter jejuni* and *Campylobacter coli* isolated from Thai children during 1991-2000. *Southeast Asian J.Trop.Med.Public Health*, 38: 501-506.

Hien, B.T.T., Trang, D.T., Scheutz, F., Cam, P.D., Mølbak, M., and A. Dalsgaard. 2007. Diarrheagenic *E. coli* and other causes of childhood diarrhoea: a case-control study in children living in a wastewater use area in Hanoi, Vietnam. *J. Medical Microbiology*, 56: 1086-1096.

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Ensink, J., Tariq, M., and A. Dalsgaard. 2007. Food safety of wastewater irrigated vegetables and fruits, does irrigation water quality matter?, *Trop.Med.Int.Health*, Suppl. 2, 12: 1-6.

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Trang, D.T., Hien, B.T.T., Mølbak, K., Cam, P.D., and Dalsgaard, A. 2007. The epidemiology and etiology of diarrhoeal diseases in adults engaged in wastewater-fed agriculture and aquaculture in Hanoi, Vietnam, *Trop.Med.Int.Health*, Suppl. 2, 12: 22-32.

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- A list of co-applicants' grants (if possible for the last 10 years, minimum requirement is 5 years). Data should relate to both African and Northern institutions.

**Prof. Anders Dalsgaard. Grants received since 2000**

- 2000 Danida. 2000-2005. Wastewater reuse in agriculture in Vietnam: a study on water management, environment, and human health aspects. Project responsible is the International Water Management Institute, Sri Lanka. The Department of Veterinary Microbiology is project responsible in Denmark. Contribution to RVAU is DKK 1,263,000.
- 2001 Environmental Protection Agency. 2001-2002. Reduction of pathogens by centralised composting of human faeces from compost toilets. Project responsible is the Danish Forest and Landscape Research Institute. Contribution to Department of Veterinary Microbiology, KVL is DKK 350,000.
- 2001 Environmental Protection Agency. 2001-2002. Evaluation of the ability of different compost toilets to reduce the pathogen numbers in collected human faeces. Project responsible is the Danish Forest and Landscape Research Institute. Contribution to Department of Veterinary Microbiology, KVL is DKK 165,000.
- 2001 Lynettefællesskabet I/S. 2001-2002. Occurrence of vancomycin-resistant enterococci in waste from vancomycin production and in wastewater. DKK 200,000.
- 2001 Environmental Protection Agency. 2001-2002. Use of treated grey wastewater to flush toilets. Project responsible is Moe & Brødsgaard. Contribution to Department of Veterinary Microbiology, KVL is DKK 80,000.
- 2001 Environmental Protection Agency. 2001-2002. Demonstration project with use of grey wastewater from a large producer of grey wastewater. Project responsible is Moe & Brødsgaard. Contribution to Department of Veterinary Microbiology, KVL is DKK 80,000.
- 2001 .Danish Agricultural and Veterinary Research Council. 2001. The Evolution of glycopeptide resistance in Gram-positive bacteria. DKK 1,710,000.
- 2001 Copenhagen Environmental Control Unit. Occurrence of resistant bacteria in the sewers receiving waste effluent from a pharmaceutical plant producing vancomycin and polymixin B. DKK 60,000.
- 2002 Environmental Protection Agency. Study of the survival and growth of enterococci and total viable count at 37°C in stored separated human urine. DKK 382,000.

- 2002 Environmental Protection Agency. 2002. Study of the survival, viability and infectivity of *Cryptosporidium parvum* og *Giardia* spp. in stored separated human urine. DKK 384,000.
- 2002 Lynettefællesskabet I/S and Alpharma. 2002 Occurrence of vancomycin-resistant enterococci in waste from vancomycin production and in wastewater. DKK 130,000.
- 2002 Danida. Preparation and implementation of workshop on Foodborne trematode infections in Hanoi, Viet Nam. Organizers: WHO, FAO and the WHO/FAO Collaborating Center for Foodborne Zoonoses (KVL). DKK 150,000.
- 2002 Danida. 2002. Planning a research capacity assistance project “Fishborne Zoonotic Parasites in Viet Nam (FIBOZOPA)”. “Initiative Pool Grant”, ENRECA, Danida. DKK 296,000.
- 2003 Environmental Protection Agency. Review of Molecular Methods for Detection of Human Pathogenic Viruses in Water. 170,000 DKK.
- 2003 EU. 2003-2005. Production in Aquatic Peri-Urban Systems in Southeast Asia (PAPUSSA). EU, INCO program. KVL contribution is 1,500,000 DKK.
- 2003 Danida and Fishery SPS (Vietnam). Fishborne Zoonotic Parasites in Viet Nam (FIBOZOPA). ENRECA, Danida. DKK 7,000,000 DKK and Fishery SPS 3,000,000 (AD is project responsible).
- 2003 International Foundation of Science. Application of PCR based assay in diagnosis of *Cyclospora* contamination in green leafy vegetables in Hanoi Vietnam. US\$ 10,000 in collaboration with Mrs. Nguyen Thuy Tram.
- 2003 International Foundation of Science. The use of composted human excreta in agriculture in Nghean province, Vietnam. 11,500 US\$ in collaboration with Dr. Pham Duc Phuc.
- 2003 Danish Council for Development Research (RUF). 2003. Human excreta use in agriculture in Vietnam - a study from the field to the latrine. Peter K. Jensen project responsible. 1,250,000 DKK.
- 2004 Marie Curie Early Stage Training site (EU). Training risk assessment in non-human antimicrobial usage (TRAINAU). Main contributors: Luca Guardabassi and Anders Dalgaard, KVL. KVL is project responsible for the project with a budget of 12.5 million DKK.
- 2004 Danish Council for Development Research (RUF). 2004. Protozoan parasites in Vietnam – food safety and human health aspects. Heidi Enemark (DFVF) is project responsible with Lise T. Klank employed as post-doc. 1,600,000 DKK.
- 2005 Water and Food CGIAR Challenge program. The impact of waste water irrigation on human health and food safety among urban communities in the Volta Basin – opportunities and risks. In collaboration with the Copenhagen University (project responsible). KVL budget is 120,000 DKK.

- 2005 Safe and High Quality Food Production using Low Improved Irrigation Systems and Management (SAFIR). 2005. EU-funded STREP project. DIAS is project coordinator. AD is project responsible for food safety and hygiene research IVP budget is approx. 3.000.000 DKK.
- 2006 Danish International Development Agency (Danida). 2006. Fishborne zoonotic parasites (FIBOZOPA) phase II (2008-2012) – a research capacity building project. 9,000,000 DKK
- 2007 Danish International Development Agency (Danida). 2006. Water supply, sanitation and hygiene promotion in Vietnam – community response and health impacts” (SANIVAT) – phase II - building research capacity within Danish sector programme support. 9,000,000 DKK.
- 2007 PathOrganic. EU-ERA Net. 2007-2009. IVS/AD allocation is approx 700,000 DKK.
- 2008 Sustainable, Sanitary and Efficient management of Animal Manure for Plant Nutrition (SUSANE). Vietnamese-Danish Science Transfer and Training Program. FFU/Danida total budget of 9,000,000 DKK with about 800,000 DKK allocation to AD/UC.
- 2008-2011 PATHOS. Leaching of pathogens and estrogens from manure separation products to freshwater (PATHOS). The Danish Strategic Research Council. IVS/AD contribution: 1.2 mill DKK.
- 2009 African SNOWS, strengthening research capacity in environmental health. 2009-2014. Wellcome Trust. IVS/AD contribution is 900,000 DKK
- 2009 Sustaining Ethical Aquaculture Trade. 2009-2013. FP7-KBBE- Large-scale collaborative project. IVS/AD is WP responsible (food safety and public health) and has a budget allocation is approx. 4.5 mill DKK.
- 2009 Antibiotic drug use, monitoring and evaluation of resistance in Ghana (ADMER) – a research capacity building project. 2009-2013. FFU/Danida total budget of 9,000,000 DKK with 3.2 mill DKK allocation to UC (AD is responsible for UC).
- 2010 "Optimizing environmentally friendly biogas production from livestock manure"? a research capacity building project. 2010-2014. FFU/Danida total budget of 6,000,000 DKK with about 600,000 DKK allocation to AD/UC.