

Evaluation of the strategic priority area
global and development-related research
and education at the University of Bergen

Preface

Global and development-related research and education has been a strategic priority area at the University of Bergen (UiB) since 1988. The current report presents the results of an evaluation of the strategic priority area with an emphasis on the period 2004-2013. The evaluation was commissioned by UiB, and carried out by a Panel of international experts in the period June 2014 to January 2015. The Nordic Institute for Studies in Innovation, Research and Education (NIFU) provided the scientific secretariat to the evaluation, with researcher Siri Aanstad serving as scientific secretary.

In its work, the Evaluation Panel has drawn on written documentation from UiB, as well as interviews with administrative and scientific staff during a site visit at the University in October 2014. The Panel is grateful to UiB for their input and hospitality, and would especially like to thank the departments/centres that prepared self-assessment reports and contributed with valuable information and stimulating discussions during the site visit. The Panel acknowledges the dedication and enormous effort put into organisation of the evaluation and report preparation by Siri Aanstad. The work has been a fascinating insight into the complexities of maintaining a strategic focus across a wide variety of disciplines that have differing traditions of conducting and disseminating research. The Panel hopes the evaluation report will be useful to UiB for furthering global and development-related research and education as a strategic priority area.

15 January 2015



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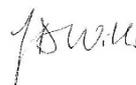
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Summary

Global and development-related research and education has been a strategic priority area at the University of Bergen (UiB) since 1988. The field of study has a long history at the University, dating from the 1960s and receiving a major impetus in the 1980s with the publication of the Brundtland Commission Report and the organisation of development research at UiB in four cross-faculty centres. The priority area has been supported by dedicated strategic funding, and a strategic committee for global and development-related research has been in place since the late 1980s.

In the summer of 2014, UiB appointed an international Panel of experts commissioned to evaluate the strategic priority of global and development-related research and education, with a main focus on the last ten-year period (2004-2013). The central objective of the evaluation was to have a systematic review and assessment of the strategic priority area. According to the term of reference, the Panel should evaluate published scientific output; postgraduate educational programmes; the added value of additional resources invested; cooperation with local academic communities; international activities, including impact and capacity building; dissemination and promotion of research results; the role played by cross-disciplinarity in developing and strengthening the priority area; the value and function of the strategic committee; and the administrative resources and support available.

The evaluation has been based on written documentation from UiB, including self-assessment reports covering 22 departments/centres across all six faculties at the University; a site visit by the Panel to UiB in the period 13-15 October 2014; and a bibliometric analysis of global and development-related research at UiB.

Global and development-related research and education is represented throughout the University to a greater or lesser degree, with some units such as the Centre for International Health and the departments of Social anthropology, Geography, and Biology having very significant interests in the area. A cross-faculty unit within the area, currently represented by UiB Global, has been through a complex series of reorganisations over the last ten years. The Panel's evaluation is at the level of the University as a whole and does not evaluate the individual research units.

The Evaluation Panel's observations and assessments are summarised in nine points:

1. The quality and relevance of the scientific output within global and development-related research in the last ten years is evaluated by the Panel as being of excellent international standard. The assessment is based on two sources of information, a bibliometric analysis and lists of publications provided in the self-assessment reports. The bibliometric analysis is based on the publicly accessible databases CRISTin and the Web of Science. It covers medicine and health, social sciences and humanities. It does not include natural sciences due to the initial criteria set for the bibliometric

analysis. Moreover, UiB Global (previously the Centre for Development Studies and Unifob Global) is poorly covered by the analysis, because the publications from the period the unit was organised as a department in Unifob Ltd. (2007-2010) are not covered by CRISStin. The results show that almost 1000 research publications within the field have been published by UiB employees during the period 2004-2013. The number has increased significantly, from less than 100 publications annually during the first years to approximately 170 publications in 2013. In terms of publication points, the increase is also strong (lowest in 2004 with 37 points and highest in 2013 with 130 points). Global and development-related research accounts for 6.4 per cent of UiB's total publication output in 2013 (based on publication points). This demonstrates UiB's distinct profile within the strategic priority area. During the period 2004-2013, the annual proportion has increased significantly (from 2.5 % in 2004), showing that relative growth in publication points in global and development-related research has been much stronger than in other areas at the University. The extent of international collaboration as indicated by co-authorship is high, involving the large majority of the global and development-related research at UiB. Different disciplines have different traditions for publishing, so it is not easy to directly compare metrics or lists of publications. Based on the relevant areas of the Panel's international expertise, the academic scientific output presented in the self-assessment reports is evaluated overall to be excellent, with the output of some units, such as the Department of Social Anthropology, being very high by international standards. Similarly, natural science publications listed by the Department of Biology, which are not included in the bibliometric analysis, also represent international excellence with many publications in high ranking journals with significant citations. UiB Global presented an extensive list of publications demonstrating an excellent and comprehensive coverage of global and development-related research. Research excellence within the strategic priority area is recognised in major prestigious awards, for example the Centre of Excellence at the Centre for International Health and the ERC Advanced Grant in the Department of Social Anthropology.

2. The Panel considers that UiB has had a strong programme of postgraduate Master's and PhD education within the strategic priority area during the period under review, though full data was not available on numbers of students and completion rates. Over the years, several international study programmes have been established with the explicit purpose of recruiting students with funding from Norwegian development schemes, and the Quota Scheme has been a significant source of postgraduate students in the priority area. The Faculty of Medicine and Dentistry has for example received many quota students. The Master's Programme in Gender and Development offered by the Department of Health Promotion and Development at the Faculty of Psychology has been the international programme at UiB with the highest number of quota applicants for several years. UiB has also had a large portfolio of projects within the Norad-funded NUFU programme, and many of the projects have allocated funds to PhD fellowships for candidates from the South. This has included fellowships for doctoral studies at UiB, as well as at institutions in the partner countries. UiB has moreover participated in Norad's Programme for Master Studies (NOMA). For example, the Department of Geography was partner in to the NOMA project Regional Master's Programme in Biodiversity and Environmental Management at Tribhuvan University, Nepal, and the Department of Comparative Politics in the project Master of Arts in Political Science at the University of Malawi. The Bergen Summer Research School is an important cross-disciplinary education programme within the strategic priority area. During the period 2008-2014 the summer school provided 39 doctoral courses, each of two weeks duration, with a total of 580 PhD students of 87 different nationalities, arriving from educational institutions in 74 countries worldwide. PhD candidates from UiB in the priority area have strong career trajectories, with many going on to influential academic and policy careers.

3. As a strategic priority area at the University of Bergen, global and development-related research has received additional resources in order to facilitate and enhance activity. The Panel has not been able to make a definite assessment of the effect of additional resources as there was a lack of data on the size and recipients of strategic funding. It is also not possible to make a precise evaluation of the leverage gained by these resources because it is hard to assess the counterfactual of benefits that would have occurred in the absence of additional resources. Benefits may also be gained tangentially to areas of focal activity as the existence of the priority area may attract funds or stimulate research

even though groups concerned are not receiving direct support. Moreover, staff appointments and replacements are likely to be retained in a subject area that aligns with the strategic priority. Large groups with a tradition of working in global and development-related research, such as at the Department of Social Anthropology, may not require additional resources to continue their interests as they will have strategically appointed staff aligned with their research tradition. However, some units, such as the Department of Sociology and the Faculty of Law, with few staff in the priority area, do benefit from a centrally organised resource. Some units report that the strategic priority of global and development-related research has had little or no significance for their activities in the field. In contrast, other units state that the strategic priority has been important, in terms of “labelling” development-related research as a priority which has helped attract both internal and external funding; facilitating the development of new educational programmes; increasing the number of quota students; and generating projects through agreements with the South. UiB Global has been important for the spread of information about relevant activities across faculties, and together with the Bergen Resource Centre for International Development, has provided access to valuable resources in the form of office space, seminar rooms, library, and meeting places.

4. Global and development-related research and education at UiB take place in cooperation with several other higher education and research institutions in Bergen. The Chr. Michelsen Institute (CMI) is a key collaborative partner, and there is also cooperation with the Rokkan Centre; the Bjerknæs Centre for Climate Research; NHH Norwegian School of Economics; Bergen University College; Helse Bergen/ Haukeland Hospital; and others. Many of the units evaluated have collaborated with local academic institutions in developing and implementing research projects over a wide range of topics. For example, the Department of Comparative Politics and CMI have collaborated on research related to institutional development in Africa since 2000. In the period 2004-2013, approximately ten research projects with external funding from the Research Council of Norway, Norad, the Ministry of Foreign Affairs, the Meltzer Research Fund, and the Norwegian Centre for International Cooperation in Education (SIU) have included researchers from the two institutions. The Bergen Resource Centre for International Development is important for research communication. The Centre is jointly owned by UiB and CMI, and opened in 2009 as an initiative to facilitate closer cooperation between the two partners and outreach to students and the public.

5. Global and development-related research and education at UiB is built on long traditions for academic cooperation with developing countries. This tradition is reflected in a high level of international activities and capacity building. The University has bilateral collaborative agreements with a large number of institutions mainly in Africa and Asia, but also in Eastern Europe. The most comprehensive institutional collaboration within global and development-related research and education is with the Makerere University in Uganda, which goes back to 1988, and covers research cooperation, competence building, exchange of students and staff, and institutional development. A cross-disciplinary long-term international programme is that on the Nile Basin, which was initiated by researchers at UiB, and has received 44.7 million Norwegian kroner in support from the Ministry of Foreign Affairs in the period up to 2010. Between 2007 and 2009, six research groups with a total of 54 guest researchers from the Nile Basin Countries have visited UiB. The Bergen Pacific Studies Research Group at the Department of Social Anthropology has developed a research consortium to advise the European Commission on its Pacific engagements funded through the EU FP7 (ECOPAS, 2012-2016). Researchers within global and development-related research at UiB are moreover involved in several international research networks. The Centre for International Health has an impressive list of partners in Asia and Africa, including long-term partnerships with institutions in particular in Sudan, Ethiopia, Tanzania and Uganda.

6. Dissemination is a fundamental part of research. In addition to scientific publications and presentations at academic conferences, the groups evaluated use a large number of different dissemination channels as important avenues for networking and expanding collaboration. Television is perhaps the most effective route for disseminating research results to a wide audience. The Department of Archaeology, History, Cultural Studies and Religion contributed to the Lost Kingdoms of

Africa (BBC) programme. An exceptional series of television programmes are those on the History of Water and the Nile Quest, both developed by Terje Tvedt, Professor at the Department of Geography. The Bergen Resource Centre for International Development is an important outlet for dissemination by organising conferences, lectures, panel debates, etc. The Centre organises around 100 events per year, and increasingly produces webcasts of the events making them available internationally. The Centre for International Health has a consistent focus on communication and outreach, including engagement with policy makers, programmers, the public at large in the South and international organisations. Traditional communication of research results through scientific conferences and publications is complemented by blogs, media reporting and popular articles. Many of the research units engage with policy makers and implementing agencies as an integral part of their research activities, thereby ensuring uptake of research outputs. Much of the research has a high social impact. Examples include the contribution of the Department of Archaeology, History, Cultural Studies and Religion to UN attempts at conflict resolution in Darfur, and the Department of Health Promotion and Development's engagement over nearly twenty years in initiating community-based projects and directly working to improve the quality of life of adults and children affected by HIV/AIDS in Africa.

7. Cross-disciplinary and interdisciplinary research is required to face modern global challenges, and these challenges are particularly acute in developing countries. This does not diminish the need for high quality in-depth mono-disciplinary work, but it does place a responsibility on individual researchers and departments to position their research within a wider context. Major funding opportunities, such as many of those presented by Horizon 2020, require an interdisciplinary approach. Several of the units involved in global and development-related research at UiB are intrinsically cross-disciplinary, for example the Department of Foreign Languages, which incorporates perspectives from studies of language, literature, linguistics, culture and history. Many of the projects within the strategic priority area are cross-disciplinary involving several departments. Two examples at the Department of Biology are the Matrix project on the Ugandan rain forest, which is conducted in collaboration with the Faculty of Law, and the HimaLines project on legal frameworks for conservation of biodiversity and ecosystem services in the Himalaya, which involves both the Faculty Law Faculty and the Department of Geography. Individual researchers also approach their work in a fundamentally cross-disciplinary way. For example, in the Department of Sociology the research activity of the staff member working in the priority area is profoundly interdisciplinary, involving collaboration and active dialogue with anthropologists, human geographers, political scientists and historians. Organisation of research in cross-disciplinary units is important for enabling this type of research to take place. Some departments and centres are large and diverse enough to be inherently interdisciplinary in their approach. For departments where this critical mass does not exist, UiB Global plays a central role in facilitating collaboration and partnerships and thereby strengthening and developing activities in the strategic priority area.

8. The strategic committee for the priority area global and development-related research has been reorganised several times since the late 1980s, and experiences with the committee vary between units and over time. According to some units, the strategic committee has played an important role in internationalisation activities, including the establishment of the Master's Programme in Gender and Development and the Bergen Summer Research School, and facilitated information sharing and networks across faculties. However, several units - within the humanities, natural sciences and medicine - report that they have had limited or no contact with the strategic committee in the period of evaluation.

9. Administrative resources available to the academic communities for activities in the priority area are from a number of sources. At the central level, the Division of Research Management offers general support for project development and internationalisation of research. The Division is responsible for facilitating participation in international programmes and networks. The Division of Student Affairs is responsible for administering international student mobility, including UiB's participation in the Quota Scheme and Norad-funded education programmes. UiB Global also supports internationalisation programmes and projects. The unit runs the Bergen Resource Centre for International Development in

collaboration with the Chr. Michelsen Institute, and facilitates project development, dissemination and education through the Bergen Summer Research School. In the self-assessments, the units were asked to report on the adequacy of administrative resources and support functions available to them. The 11 units that report on this topic are overall satisfied with the general support provided by their department and/or faculty. Many units also stressed the importance of UiB Global for support.

Based on these observations and assessments, the Evaluation Panel recommends that the University of Bergen should:

- retain global and development-related research and education as a strategic priority area and ensure that all research and education in the priority area is represented in the University's publicity and policy.
- proactively identify groups and individuals conducting exciting innovative research across the spectrum of activity in the strategic priority area and promote two to four of them annually to form competitive "centres of excellence" that will enable them to obtain funding at national, European and international levels.
- reorganise university-wide time-allocation systems so that inter-departmental and cross-faculty teaching and student supervision is recognised and appropriately accounted for.
- review the options for organisational delivery with university-wide consultation. For example: a central model directly under the university leadership; a matrix model with established centres in faculties; an ad hoc model of emerging research groups; a hub topic model across departments with clusters around topics. A practical solution for UiB may involve a combination of these models, though it must have clarity of purpose.
- enhance information exchange on interdisciplinary educational opportunities across the University, and create new forums if necessary.
- encourage students to participate through credit-rating for interdisciplinary courses in Master's programmes and competitions for PhD student presentations.
- continue support to the Bergen Summer Research School and Bergen Resource Centre for International Development.
- enhance the role played by UiB Global in developing partnerships with local academic partner institutions and facilitate dialogue between the partners and research units who do not currently engage with them.
- strategically maintain partnerships with long-term research and education partners in the South through support to a unit, such as UiB Global, tasked with developing research and education projects with the partners
- maintain and enhance alumni networks, engaging them in continuing research and educational activities at UiB.
- from the outset, design projects with social impact and communication strategies and have expertise available to advise on how to best do this.
- ensure that the Division of Research Management, as well as the faculty and department administrations, are actively informing researchers working in the priority area of global and development-related research of suitable funding opportunities and assisting with partner searches and preparation of applications.

Sammendrag

Global og utviklingsrelatert forskning og utdanning har vært et strategisk satsingsområde ved Universitetet i Bergen (UiB) siden 1988. Forskningsfeltet har en lang historie ved universitetet; det vokste for alvor frem i 1960-årene, og fikk en oppsving på 1980-tallet med fremleggelsen av rapporten til Brundtlandkommisjonen og organiseringen av utviklingsforskningen ved UiB i fire tverrfaglige sentre. Satsingsområdet har blitt støttet gjennom strategisk finansiering, og universitetet har hatt et strategisk utvalg for utviklingsrelatert forskning siden slutten av 1980-tallet.

Sommeren 2014 oppnevnte UiB et internasjonalt panel av eksperter som ble gitt i oppdrag å evaluere den strategiske satsingen på global og utviklingsrelatert forskning og utvikling, med vekt på de siste ti årene (2004-2013). Hovedformålet med evalueringen var å få en systematisk gjennomgang og vurdering av satsingsområdet. I følge mandatet, skulle panelet evaluere den vitenskapelige produksjonen, utdanningstilbudet på master- og doktorgradsnivå, merverdien av de ekstra ressursene som har blitt investert i satsingsområdet, samarbeid med relevante fagmiljøer i UiBs randsone, internasjonal virksomhet, inkludert kompetanseoppbygging ute ("impact"), formidling og synliggjøring av forskningsresultater, betydningen tverrfaglighet har hatt for utvikling og styrking av feltet, nytteverdien og funksjonen til det strategiske utvalget, og tilgjengelige administrative ressurser og støttefunksjoner.

Evalueringen har bygget på skriftlig dokumentasjon fra UiB, inkludert egenvurderingsrapporter som dekker 22 institutter/sentre fordelt på alle de seks fakultetene ved universitetet, et institusjonsbesøk panelet gjennomførte ved UiB i perioden 13.-15. oktober 2014, og en bibliometrisk analyse av global og utviklingsrelatert forskning ved UiB.

Global og utviklingsrelatert forskning og utdanning finner sted ved hele universitetet, men i varierende grad og med spesiell tyngde ved enheter som Senter for Internasjonal Helse, Institutt for Sosialantropologi, Institutt for Geografi og Institutt for Biologi. UiB Global er en tverrfakultær enhet innenfor feltet som har vært gjennom komplekse reorganiseringer de siste ti årene. Panelets evaluering gjelder for universitetet samlet sett og det gis ikke evalueringer av de enkelte enhetene.

Evalueringspanelets sentrale observasjoner og vurderinger er oppsummert i ni punkter:

1. Kvaliteten og relevansen på den vitenskapelige produksjonen innenfor global og utviklingsrelatert forskning de siste ti årene holder ifølge panelets vurdering fremragende internasjonal standard. Vurderingen er basert på to kilder - en bibliometrisk analyse og publikasjonslister i egenvurderingsrapportene. Den bibliometriske analysen bygger på de offentlig tilgjengelige publikasjonsdatabasene CRIStin og Web of Science. Analysen omfatter

fagområdene medisin og helse, samfunnsvitenskap og humaniora. Gitt de opprinnelige avgrenskingskriteriene for den bibliometriske analysen, dekker den ikke naturvitenskap. Videre er publikasjonene til UiB Global (tidligere Senter for utviklingsstudier og Unifob Global) dårlig dekket, siden publikasjonene fra perioden enheten var organisert som en avdeling i Unifob (2007-2010) ikke er registrert i CRISStin. Resultatene viser at forskere ved UiB har publisert nesten 1000 publikasjoner på området i perioden 2004-2013. Det har vært en betydelig økning i antall publikasjoner, fra under 100 per år i de første årene til rundt 170 i 2013. Det har også vært en sterk økning i publikasjonspoeng (med 37 poeng i 2004 som det laveste antallet og 130 poeng i 2013 som det høyest). Global og utviklingsrelatert forskning står for 6,4 prosent av UiBs samlede vitenskapelige publisering i 2013 (basert på publikasjonspoeng). Dette demonstrerer universitetets klare profil innenfor det strategiske satsingsområdet. Andelen har økt betydelig i perioden 2004-2012 (fra 2,5 prosent i 2004), hvilket betyr at veksten i publikasjonspoeng innenfor global og utviklingsrelatert forskning har vært relativt sterkere enn innenfor andre områder ved universitetet. Omfanget av internasjonalt samarbeid målt i sampublikasjoner er stort innenfor det meste av den utviklingsrelaterte forskningen ved UiB. Fordi ulike fagområder har ulike publiseringstradisjoner, er det vanskelig å gjøre direkte sammenligner ved hjelp av publikasjonsskår eller publikasjonslister. Ut fra panelets relevante internasjonale ekspertise, vurderes den vitenskapelige produksjonen som er presentert i egenevalueringene generelt som fremragende, og produksjonen ved enkelte enheter, som Institutt for sosialantropologi, som svært høy etter internasjonale standarder. Institutt for biologi, som ikke er inkludert i den bibliometriske analysen, har også internasjonalt fremragende forskning med mange publikasjoner i anerkjente tidsskrifter og betydelig sitering. UiB Global presenterte en omfattende liste over publikasjoner med fremragende og bred dekning av global og utviklingsrelatert forskning. Fremragende forskning innenfor det strategiske satsingsområdet er anerkjent gjennom store prestisjefylte tildelinger, som et Senter for Fremragende Forskning ved Senter for internasjonal helse og en ERC Advanced Grant ved Institutt for sosialantropologi.

2. Det er panelets vurdering at UiB har hatt et sterkt master- og PhD-utdanningstilbud innenfor det strategiske satsingsområdet i evalueringsperioden, selv om komplette data for antall studenter og gjennomføringsgrad ikke har vært tilgjengelig. UiB har opprettet flere internasjonale studieprogrammer med tanke på å rekruttere studenter med finansiering fra norske utviklingsprogrammer, og Kvoteordningen har vært en betydelig kilde til høyeregradsstudenter innenfor det strategiske satsingsområdet. For eksempel har Det medisinsk-odontologiske fakultet hatt mange kvotestudenter. HEMIL-senterets Master of Philosophy i Gender and Development, ved Det psykologiske fakultet, har i mange år vært det internasjonale studieprogrammet ved UiB med flest kvotestudentsøknader. UiB har også hatt en stor prosjektportefølje innenfor det Norad-finansierte NUFU-programmet, og mange av prosjektene har avsatt midler til PhD-stipend for kandidater fra land i Sør. Det har omfattet stipender for doktorgradsstudier ved UiB, så vel som ved institusjoner i Sør. UiB har videre deltatt i Norads program for masterstudier (NOMA). For eksempel har Institutt for geografi vært partner i NOMA-prosjektet Regional Master's Programme in Biodiversity and Environmental Management ved Tribhuvan University, Nepal, og Institutt for sammenliknende Politikk i prosjektet Master of Arts in Political Science ved the University of Malawi. Bergen sommer-forskerskole (Bergen Summer Research School) gir viktig tverrfaglig utdanning innenfor det strategiske satsingsområdet. I perioden 2008-2014, har sommerskolen avholdt 39 doktorgradskurs av to ukers varighet, for til sammen 580 PhD studenter med 87 ulike nasjonaliteter fra utdanningsinstitusjoner i 74 land verden over. Mange PhD kandidater innenfor satsingsområdet har fremgangsrike karrierer innenfor akademia og politikk.
3. Som et strategisk satsingsområde ved Universitetet i Bergen, har global og utviklingsrelatert forskning fått tilført ekstra ressurser ment for å tilrettelegge og styrke aktivitet. Panelet har ikke kunnet gjøre en endelig vurdering av effekten av de ekstra ressursene, siden det mangler data for størrelsen på og mottagerne av strategisk finansiering. Det er heller ikke mulig å gjøre en presis evaluering av hvordan disse ressursene har bidratt til å styrke området fordi det er vanskelig å gjøre kontrafaktiske vurderinger av hvordan utviklingen hadde vært uten tilførsel

av ekstra ressurser. Aktiviteten innenfor et strategisk satsingsområde kan også bli styrket uten at det gis direkte strategisk støtte, for eksempel ved at satsingen bidrar til økt tilfang på ekstern finansiering. I tillegg er det sannsynlig at stillinger videreføres innenfor områder som er del av en strategisk satsing. Store miljøer med tradisjoner innenfor global og utviklingsrelatert forskning, som ved Institutt for sosialantropologi, trenger ikke nødvendigvis ekstra ressurser for å opprettholde aktiviteten ettersom de vil ha en vitenskapelig stab som gjenspeiler forskningstradisjonen. Mindre miljøer, som ved Sosiologisk institutt og Det juridiske fakultet, drar imidlertid nytte av sentralt organiserte ressurser. Noen enheter rapporterer at den strategiske satsingen på global og utviklingsrelatert forskning har hatt liten eller ingen betydning for virksomheten deres innenfor dette området. Andre gir uttrykk for at satsingen har vært viktig med hensyn til å fremheve utviklingsrelatert forskning som et prioritert område og dermed bidra til tilgang på intern og ekstern finansiering, til å legge til rette for utviklingen av nye utdanningsprogrammer, til å øke antallet kvotestudenter, og til å generere prosjekter gjennom avtaler med land i Sør. UiB Global har vært viktig for spredningen av informasjon om relevante aktiviteter på tvers av fakulteter, og sammen med Bergen Resource Centre for International Development, har enheten gitt tilgang til verdifulle ressurser i form av kontorer, seminarrom, bibliotek og møteplasser.

4. Global og utviklingsrelatert forskning og utdanning ved UiB skjer i samarbeid med flere andre høyere utdannings- og forskningsinstitusjoner i Bergen. Chr. Michelsens Institutt (CMI) er en sentral samarbeidspartner, og det er også samarbeid med Rokkansenteret, Bjerknessenteret for klimaforskning, Norge Handelshøyskole (NHH), Høgskolen i Bergen, Helse Bergen/Haukeland universitetssykehus og andre. Mange av evalueringsenhetene har samarbeidet med lokale akademiske institusjoner om å utvikle og gjennomføre forskningsprosjekter innenfor et bredt spekter av temaer. For eksempel har Institutt for sammenlignende politikk og CMI samarbeidet om forskning knyttet til institusjonell utvikling i Afrika siden 2000. I perioden 2004-2013, har forskere fra de to institusjonene samarbeidet i rundt ti prosjekter med ekstern finansiering fra Norges forskningsråd, Norad, Utenriksdepartementet, Meltzerfondet og Senter for Internasjonalisering av Utdanning (SIU). Bergen Resource Centre for International Development er viktig for forskningskommunikasjon. Senteret eies i fellesskap av UiB og CMI, og åpnet i 2009 som et initiativ for å legge til rette for nærmere samarbeid mellom de to institusjonene og utadrettet virksomhet mot studenter og offentligheten.
5. Global og utviklingsrelatert forskning og utdanning ved UiB bygger på lange tradisjoner for akademisk samarbeid med utviklingsland. Denne tradisjonen gjenspeiles i et høyt nivå av internasjonal aktivitet og kapasitetsbygging. Universitetet har bilaterale samarbeidsavtaler med et stort antall institusjoner, i hovedsak i Afrika og Asia, men også i Øst-Europa. Det mest omfattende institusjonelle samarbeidet innenfor global og utviklingsrelatert forskning er med Makerere University i Uganda. Samarbeidet har eksistert siden 1988, og omfatter forskning, kompetansebygging, utveksling av studenter og ansatte, og institusjonsutvikling. Nil-programmet er et tverrfaglig internasjonalt program som ble initiert av forskere ved UiB og har mottatt 44,7 millioner kroner i støtte fra Utenriksdepartementet i perioden opp til 2010. Mellom 2007 og 2009, har seks forskningsgrupper med tilsammen 54 gjesteforskere fra landene langs Nilen hatt opphold ved UiB. Forskergruppen Bergen Pacific Studies ved Institutt for sosialantropologi har utviklet et konsortium med støtte fra EUs 7. Rammeprogram (ECOPAS, 2012-2016) som gir Europakommisjonen råd om europeisk engasjement i Stillehavsregionen. Forskere innenfor global og utviklingsrelatert forskning ved UiB er videre involvert i flere internasjonale forskningsnettverk. Senter for internasjonal helse har et imponerende antall partnere i Asia og Afrika, inkludert langsiktige partnerskap med institusjoner særlig i Sudan, Etiopia, Tanzania og Uganda.
6. Formidling er en grunnleggende del av forskningsvirksomhet. I tillegg til vitenskapelige publikasjoner og akademiske konferanser, benytter evalueringsenhetene seg av et stor antall ulike formidlingskanaler for å bygge nettverk og utvide samarbeid. TV er kanskje den mest effektive kanalen for å formidle forskningsresultater til et bredt publikum. Institutt for arkeologi,

historie, kultur- og religionsvitenskap bidro til programmet *Lost Kingdoms of Africa* (BBC). Dokumentarene *The History of Water* og *The Nile Quest*, er to eksepsjonelle TV-serier utviklet av Terje Tvedt, professor ved Institutt for geografi. Bergen Resource Centre for International Development utgjør en viktig formidlingskanal gjennom å arrangere konferanser, foredrag, paneldebatter, osv. Senteret har rundt 100 arrangementer i året, og benytter seg i økende grad av webcasts som gjør arrangementene internasjonalt tilgjengelige. Senter for internasjonal helse har vedvarende oppmerksomhet på kommunikasjon og utadrettet virksomhet, inkludert samspill med aktører innen politikk- og programutforming, befolkningen i land i Sør og internasjonale organisasjoner. Tradisjonell kommunikasjon av forskningsresultater gjennom vitenskapelige konferanser og publikasjoner suppleres av blogger, mediebidrag og populærvitenskapelige artikler. Anvendelse av forskningsresultater sikres ved at kontakt med politikktutformere og bistandsorganisasjoner er en integrert del av forskningsaktiviteten til mange av enhetene. Mye av forskningen har stor samfunnsmessig betydning («impact»). Eksempler er bidraget fra Institutt for arkeologi, historie, kultur- og religionsstudier til FNs forsøk på konfliktløsning i Darfur, og HEMIL-senterets nesten tyve-årige engasjement i prosjekter og arbeid for å bedre livskvaliteten til voksne og barn rammet av HIV/AIDS i Afrika.

7. Tverrfaglig og interdisiplinær forskning er nødvendig for å møte dagens globale utfordringer, og disse utfordringene er særlig påtrengende i utviklingsland. Det reduserer ikke behovet for dyptpløyende arbeid av høy kvalitet innenfor fagdisiplinene, men pålegger enkeltforskere og institutter et ansvar for å plassere forskningen sin i en større kontekst. Store finansieringsmuligheter, som mange av utlysningene innenfor Horisont 2020, krever tverrfaglige tilnærminger. Flere av enhetene som er involvert i global og utviklingsrelatert forskning ved UiB er grunnleggende tverrfaglige, som for eksempel, Institutt for fremmedspråk, som bruker perspektiver fra studier av språk, litteratur, lingvistikk, kultur og historie. Mange av prosjektene innenfor det strategiske satsingsområdet er tverrfaglige. To eksempler ved Institutt for biologi er Matrix-prosjektet om regnskog i Uganda, som gjennomføres i samarbeid med Det juridiske fakultet, og HimaLines-prosjektet om juridiske rammeverk for konservering av biodiversitet og økosystemer i Himalaya, som involverer både Det juridiske fakultet og Institutt for geografi. Enkeltforskere har også grunnleggende tverrfaglige tilnærminger til arbeidet sitt. Dette gjelder eksempelvis arbeidet innenfor feltet ved Sosiologisk institutt, som omfatter samarbeid og aktiv dialog med antropologer, samfunnsgeografer, statsvitere og historikere. Organiseringen av forskning i tverrfaglige enheter er viktig for å muliggjøre slik forskning. Noen institutter og sentre er store og mangfoldige nok til å ha en egen interdisiplinær tilnærming. For institutter som mangler slik kritisk masse, spiller UiB Global en viktig rolle i å legge til rette for samarbeid og partnerskap og dermed i å styrke og utvikle virksomhet innenfor det strategiske satsingsområdet.
8. Det strategiske utvalget for satsingsområdet global og utviklingsrelatert forskning har blitt reorganisert flere ganger siden slutten av 1980-tallet, og erfaringer med utvalget varierer over tid og mellom enhetene. Utvalget har ifølge noen enheter spilt en viktig rolle i internasjonaliseringsaktiviteter, inkludert etableringen av Master programmet Gender and Development og Bergen sommer-forskerskole, og lagt til rette for deling av informasjon og nettverk på tvers av fakulteter. Det er imidlertid flere enheter – innenfor humaniora, naturvitenskap og medisin – som rapporterer at de har hatt lite eller ingen kontakt med det strategiske utvalget i evalueringsperioden.
9. Fagmiljøene innenfor satsingsområdet har tilgang på administrative ressurser fra flere kilder. På sentralt nivå, tilbyr Forskningsadministrativ avdeling generell støtte til prosjektutvikling og internasjonalisering av forskning. Avdelingen har ansvar for å legge til rette for deltagelse i internasjonale programmer og nettverk. Studieadministrativ avdeling er ansvarlig for å administrere internasjonal studentmobilitet, inkludert UiBs deltagelse i Kvoteordningen og Norad-finansierte utdanningsprogrammer. UiB Global gir også støtte til internasjonaliseringsprogrammer og prosjekter. Enheten driver Bergen Resource Centre for International Development i samarbeid med Chr. Michelsen Institutt, og fremmer

prosjektutvikling, formidling og utdanning gjennom Bergen sommer-forskerskole. I egenrevisningene ble enhetene bedt om å rapportere om de har tilgang på tilstrekkelige administrative ressurser og støttefunksjoner. De elleve enhetene som rapporterte på dette området, er overveiende fornøyd med den generelle støtten de får fra instituttet og/eller fakultetet. Mange enheter la også vekt på betydningen av støtte fra UiB Global.

Basert på disse observasjonene og vurderingene, anbefaler evalueringspanelet at UiB

- opprettholder global og utviklingsrelatert forskning og utdanning som et strategisk satsingsområde, og sikrer at all forskning og utdanning innenfor satsingsområdet er representert i universitetets profilering og strategi.
- proaktivt identifiserer grupper og enkeltforskere som utfører spennende innovativ forskning på tvers av satsingsområdet, og gir støtte til to til fire grupper/enkeltforskere hvert år for etablering av konkurransedyktige "Centres of Excellence" som vil gjøre dem i stand til å generere finansiering på nasjonalt, europeisk og internasjonalt nivå.
- endrer universitets tidsregnskap slik at undervisning og veiledning av studenter på tvers av institutter og fakulteter anerkjennes og dokumenteres på en adekvat måte.
- vurderer organisatoriske løsninger for samarbeid på tvers av institutter og fakulteter. For eksempel: en sentral modell direkte under universitetsledelsen, en matrise-modell med etablerte sentre innenfor fakultetene, en ad hoc-modell med forskningsgrupper på vei opp; en tematisk "hub"-modell med tematiske klynger på tvers av institutter. En praktisk løsning for UiB kan innebære en kombinasjon av disse modellene, men det er en forutsetning at den valgte løsningen har klare målsettinger.
- øker utvekslingen av informasjon om interdisiplinære utdanningstilbud på tvers av universitetet, og etablerer nye fora hvis det er nødvendig.
- oppmuntrer studenter til å delta i interdisiplinære aktiviteter gjennom ulike tiltak.
- viderefører støtten til Bergen sommer-forskerskole og Bergen Resource Centre for International Development.
- styrker rollen UiB Global spiller i utviklingen av partnerskap med lokale akademiske partnerinstitusjoner, og legger til rette for dialog mellom partnerinstitusjonene og enhetene ved universitetet som per i dag ikke er engasjert i lokalt samarbeid.
- sørger for strategisk opprettholdelse av partnerskap med langvarige forsknings- og utdanningspartnere i Sør gjennom støtte til en enhet, som UiB Global, med ansvar for å utvikle forsknings- og utdanningsprosjekter i samarbeid med partnerne.
- opprettholder og styrker alumni-nettverk, og involverer dem i de kontinuerlige forsknings- og utdanningsaktivitetene ved UiB.
- sørger for at prosjekter har planer for kommunikasjon og samfunnsnytte ("impact"), og for tilgjengelig ekspertise for dette.
- sørger for at Forskningsadministrativ avdeling, så vel som det administrative støtteapparatet på institutt- og fakultetsnivå, aktivt informerer forskere innenfor satsingsområdet global og utviklingsrelatert forskning om passende finansieringsmuligheter og bistår i partnersøk og søknadsarbeid.

1 Introduction

Global and development-related studies has been a strategic priority area at the University of Bergen (UiB) since the late 1980s. The current report is prepared by an international Panel of experts commissioned by UiB to evaluate the strategic priority of global and development-related research and education, with a main focus on the last ten-year period (2004-2013).

The Panel discussed the strategic priority with a large number of people from a wide range of disciplines during a visit to UiB 13-15 October 2014, and also drew on information from self-assessment reports provided by the research units. In interpreting the findings of the Panel it is important to bear in mind that the evaluation is at the level of the University as a whole and does not evaluate the individual research units.

The strategic priority area has a long history, which includes many actors and complex organisational changes. While the main organisational developments are outlined in the report, the Evaluation Panel has not delved into the historical details, but focused primarily on the current situation and the opportunities for the future.

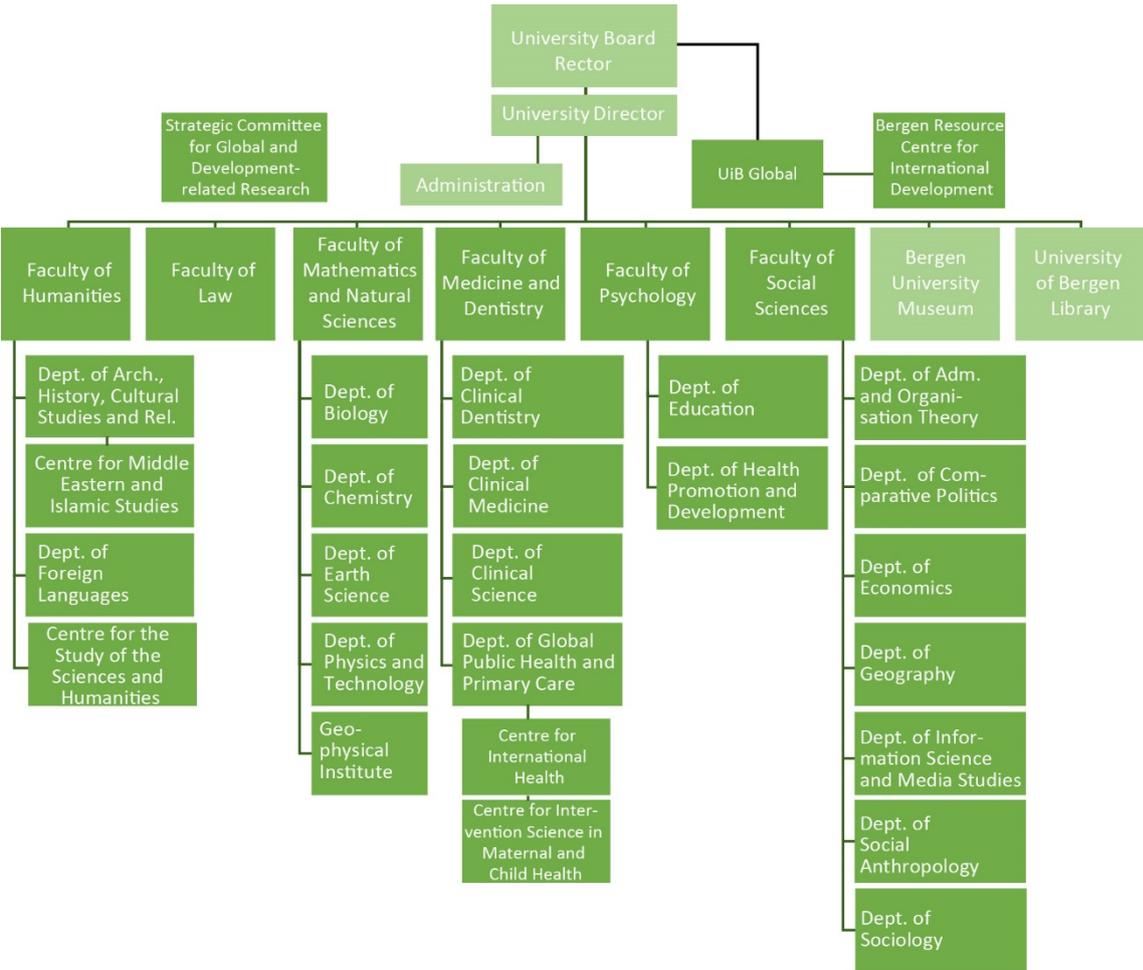
1.1 The organisation of global and development-related research and education at the University of Bergen

Global and development-related research and education at the University of Bergen is a broad field of study that goes beyond the traditional, social science-dominated area of development studies. UiB defines global and development-related research as “research that is relevant for dealing with the great challenges of the 21st century, and that is particularly relevant for understanding the background, inter-linkages and processes of change at global, regional and local level.”¹

Studies within the field take place at all six faculties and a high number of departments and centres at the university, cf. figure 1.1 below.

¹ Definition provided in the presentation of the strategic priority area global and development-related research at the webpages of UiB (in Norwegian: «forskning som er aktuell for å håndtere de store utfordringene i det 21. århundre og som er særlig relevant for å forstå bakgrunn, sammenhenger og endringsprosesser på globalt, regionalt og lokalt nivå.»), URL: <http://www.uib.no/forskning/75360/utviklingsrelatert-forskning>

Figure 1.1 The organisation of global and development-related research and education at UiB



Source: NIFU

Key actors within the field are found at the faculties of Social Sciences, Humanities, Medicine and Dentistry, Psychology, and Mathematics and Natural Sciences (see Section 2.1).

At the Faculty of Social Sciences, most global and development-related studies take place in the departments of Social Anthropology, Comparative Politics and Geography (according to the number of staff engaged in the research), but with important contributions from other departments. The Department of Economics in particular conducts collaborative work with institutes such as Chr. Michelsen Institute, and the Department of Sociology has conducted research on social movements in India. There are two main lines of research at the Faculty: regionally focused and globally comparative studies of society and political processes; and studies of global challenges and local adjustments with a particular emphasis on the relations between resources, poverty, health and power.

Cultural studies of global and development-related issues at the Faculty of Humanities are carried out especially by the Department of Archaeology, History, Cultural Studies and Religion which hosts the Centre for Middle Eastern and Islamic Studies (*Senter for Midtøsten- og islamske studier*, SMI). SMI is a cross-faculty unit responsible for co-ordinating and promoting research on the Middle East within the humanities and social sciences.

The Centre for International Health (CIH) is a cross-faculty unit specialising in research, education and leadership development aimed at improving health in low- and middle-income countries. The Centre is part of the Department of Global Public Health and Primary Care at the Faculty of Medicine and

Dentistry, but research and education take place in close collaboration with other departments and faculties at UiB. In 2013, CIH was awarded a Centre of Excellence (CoE) from the Research Council of Norway - the Centre for Intervention Science in Maternal and Child Health (CISMAC). The CoE scheme provides funding for time-limited research centres (2x5 years) selected on the basis of international peer review/scientific quality, with the aim to promote Norwegian research of high international standard.

The Department of Health Promotion and Development (HEMIL) at the Faculty of Psychology has development-related studies in diverse cultural settings as a main area of research. The research is for a large part organised in the research group "Multicultural venues in health, gender and social justice" which also includes some researchers from the Department of Education.

At the Faculty of Mathematics and Natural Sciences, the Department of Biology is the main actor within global and development-related research. The department has a long tradition of environmental and resource studies with global relevance, including relevance for development in the South. There are some important development interventions with technology transfer and capacity building in the Department of Physics and Technology, particularly on optics and ultraviolet radiation; and the Department of Earth Science conducts global research of earthquake and tsunami hazards.

UiB Global is a cross-faculty unit responsible for initiating and co-ordinating multi- and cross-disciplinary activities within the field of global and development-related studies at the University. In addition to supporting activities across departments and faculties, UiB Global runs its own portfolio of research programmes and research related activities. The unit has an academic leadership and its own administrative staff, and reports to the central University leadership.

UiB Global is co-located with Chr. Michelsen Institute (CMI), an independent development research institute with close collaborative linkages to the University of Bergen. Together, UiB Global and CMI run the Bergen Resource Centre for International Development. The Resource Centre holds a large collection of literature on development-related issues and organises lectures, seminars and other activities that facilitate the dissemination and discussion of knowledge on international development and global challenges.

The Strategic Committee for Global and Development-related Research is an advisory body for global and development-related research at UiB. The Committee has representatives from all faculties, and reports to the central University leadership.

1.2 The strategic priority of global and development-related studies

Background

The University of Bergen has a long tradition for development-related research. It goes back to the work carried out by missionaries at the Bergen Museum, which was the main academic institution in Bergen before establishment of the University in 1946. In the 1960s, the anthropology department built up under the leadership of the prominent social anthropologist Fredrik Barth played an important role in establishing the field as a strong area of research at UiB, and the University has over the years developed extensive academic collaboration with partners in the Global South.

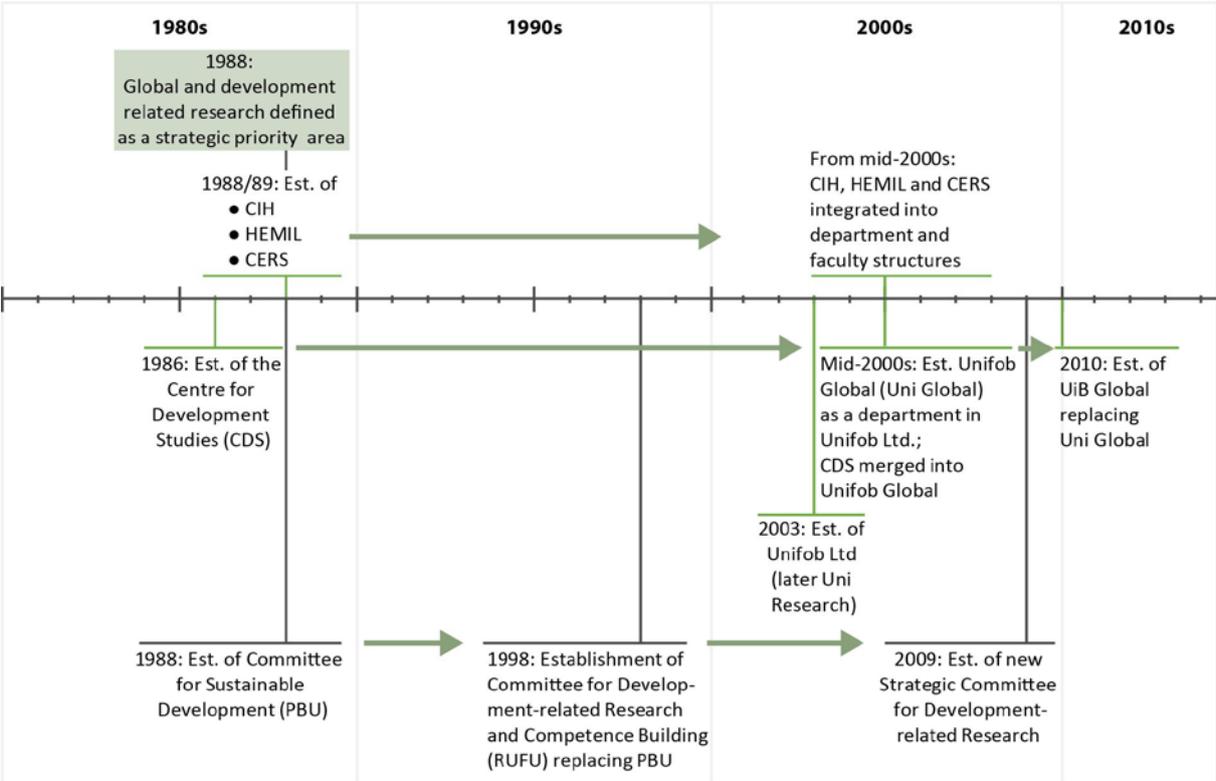
In 1988, UiB defined development research as one of two strategic priority areas, the other being marine research. The priority areas reflected the traditions and competitive advantages of the university, and emerged as particularly relevant given the background of the publication of the Brundtland Commission report in 1987 with its emphasis on sustainable development. Development-related research now takes place across the university in a wide variety of forms in many different disciplines.

The strategic priority of what is today referred to as global and development-related research and education at UiB, is well aligned with national research political priorities. The current emphasis on addressing global challenges and the traditional focus on supporting research and education as central elements in Norwegian development policies, mean that the strategic priority area at UiB is highly relevant from a national perspective and in a good position to attract external funding.

Organisational developments since the late 1980s

The organisation of global and development-related research at UiB has been subject to recurring discussions since the late 1980s, and there has been a series of reorganisations over the past 25 years. The key organisational changes are shown in the timeline below.

Figure 1.2 Key developments in the organisation of global and development-related research at UiB since 1988



CiH: Centre for International Health
 HEMIL: Centre for Health Promotion and Lifestyle Research
 CERS: Centre for Environment and Resource Studies
 CDS: Centre for Development Studies

Source: NIFU

Cross-faculty centres

When development research was defined as a strategic priority area in the late 1980s, a key initiative was to organise the research area in cross-faculty centres under the University Board. By the turn of the decade, four centres were in place: the Centre for Development Studies (CDS, est. in 1986); the Centre for Health Promotion and Lifestyle Research (HEMIL, est. in 1988); the Centre for International Health (CIH, est. in 1988); and the Centre for Environmental and Resource Studies (CERS, established in 1989).

The centres operated as units under the University Board until the mid-2000s, when HEMIL, CIH and CERS were integrated into the faculties of Psychology, Medicine, and Mathematics and Natural Sciences respectively. HEMIL became part of the Department of Education and Health Promotion at the Faculty of Psychology in 2004. In 2010, when the Faculty introduced a new department structure,

HEMIL was organised as a separate department - the Department of Health Promotion and Development. CIH was organised as a cross-faculty department at the Faculty of Medicine² in 2005, and subsequently became part of the new Department of Global Public Health and Primary Care at the Faculty of Medicine and Dentistry in 2010. CERS was merged into the Department of Biology in 2006, and no longer exists as a distinct unit.

The Centre for Development Studies, which had been responsible for stimulating, initiating and co-ordinating development-related research and education across departments and faculties, was integrated into a new co-ordinating unit – Unifob Global, which is described in further detail below.³

Co-ordinating units: Unifob Global and UiB Global

Unifob Global was formally established in 2007. The new unit was organised as a department in UiB's research company Unifob Ltd.,⁴ which had been established in 2003 to administer externally funded research at the University.

The background was a process that had been started up in 2002, with the aim to strengthen the organisation of development-related research at UiB. Based on an internal review and hearing, the University Board made the decision to establish a separate department for development-related research at Unifob in 2005. A key argument was the need for an integrated organisation of the externally funded project portfolio within the field, reflecting, among other things, that the research activities were increasingly organised in large, cross-disciplinary projects. It was at the same time stressed that the research should be based in the basic university units.⁵

Unifob Global was to be a tool for the basic units involved in global and development-related studies at UiB, and given the role as a:

- service centre for ongoing projects;
- promoter of, and participant in, cross-disciplinary and cross-faculty project applications; and
- promoter of, and participant in, the strategic-administrative development of the field at the University.⁶

The unit had a Council with representatives of all the faculties at UiB, and was headed by an Academic Director. In addition to an administrative staff, it employed researchers mainly on a temporary basis as well as scientific staff at UiB in secondary positions.⁷

Unifob Global was established for a trial period of three years, and in 2009, the unit was evaluated by a committee with members from both UiB and external institutions. In addition to assessing experiences with the current organisation and what results had been achieved, the evaluation was to discuss alternatives for future organisation of the unit's activities.⁸

While the evaluation of Unifob Global was generally positive, a main conclusion was that UiB would benefit from reintegrating the unit's activities. The conclusion was based on several different considerations, including changes in the relations between UiB and Unifob which meant that Unifob

² The Faculty of Medicine merged with the Faculty of Dentistry in 2008.

³ «Utviklingsrelatert forskning ved UiB/Unifob AS. Økonomi og personal. Bergen, 14. oktober 2005»; «Utviklingsrelatert virksomhet. Oppfølging av vedtak i universitetsstyret av 9.6.05»

⁴ Unifob was renamed Uni Research in 2009, and Unifob Global was subsequently called Uni Global. This report consistently refers to the unit as Unifob Global.

⁵ «Utviklingsrelatert virksomhet. Oppfølging av vedtak i universitetsstyret av 9.6.05»; «Organisering av utviklingsrelatert og global forskning ved Universitetet i Bergen. En gjennomgang av situasjonen for Unifob Global, 2009»

⁶ *Evalueringsrapport Unifob Global*

⁷ *Evalueringsrapport Unifob Global*; «Universitetets utviklingsforskning ved Uni Global – tilbakeføring til universitetet», 2010

⁸ *Evalueringsrapport Unifob Global*

was developing into more of an independent research institution with research activities complementing those of UiB.⁹

The evaluation report presented two main alternatives for reintegrating Unifob Global into the university: 1. to reintegrate the unit as a centre or department; 2. to establish a cross-faculty unit combining the functions associated with a department/centre with a more strategic role in further developing the field of global and development-related research and education at UiB.¹⁰

Based on the evaluation and internal discussions at the University, the University Board decided that the UiB research activities that were organised through Unifob Global should be reintegrated into the University departments the involved researchers belonged to. To facilitate the initiation and co-ordination of cross-disciplinary cooperation within global and development-related research, UiB Global was established as an internal, cross-faculty unit in 2010, consisting mainly of administrative support staff and headed by an Academic Director. The unit was located in the previous offices of Unifob Global, and was to serve as a scientific meeting place offering guest offices and meeting rooms for visiting researchers as well as University staff. It was also to run research programmes and other research related activities that had sorted under Unifob Global.¹¹

It became clear to the Panel during the course of the evaluation that the decisions relating to Unifob Global were controversial and have caused strong differences of opinion. However, it is not the function of the present Panel to re-evaluate previous evaluations or revisit decisions concerning Unifob Global.

Strategic committees

UiB has had a strategic committee for global and development-related studies since the field became a strategic priority in 1988. It started out as the Committee for Sustainable Development (*Råd for program for bærekraftig utvikling*, PBU), made up of the leaders of four cross-faculty centres referred to above. The committee had close connections to the central university leadership, and engaged in the strategic development of research and competence building activities across faculties and disciplines as well as academic quality assurance of project applications and scientific reporting.

In 1998, PBU was replaced by the Committee for Development-related Research and Competence building (*Rådet for Utviklingsrelatert Forskning og Utdanning*, RUFU). The new committee consisted of representatives from all the faculties at UiB, and was given the mandate:

*to initiate and follow up on interdisciplinary and interfaculty collaborative initiatives within the field, and be an advisory body for the research communities, faculties and central units. The Committee is to provide quality assurance of project applications, contribute to project administration and strengthen the scientific reporting to the project funding organisations.*¹²

RUFU was established on the initiative of a group of PBU members and other actors involved in development-related activities at UiB, who saw a need for broader representation as well as a stronger strategic role for the committee in order to strengthen research and facilitate interdisciplinary and interfaculty activities in the field. The group's recommendation that the committee should have its own budget was not followed up.¹³

In 2008, the University Board decided to appoint similar strategic committees for the two strategic priority areas at UiB. As a result, a new Strategic Committee for Development-related Research was established in 2009 with representatives from all faculties and with the Academic Director of Unifob

⁹ *Evalueringsrapport Unifob Global*

¹⁰ *Evalueringsrapport Unifob Global*

¹¹ «Universitetets utviklingsforskning ved Uni Global – tilbakeføring til universitetet», 2009; University Board document, 01.12.2010; self-assessment of UiB Global

¹² «Råd for utviklingsrelatert forskning og utdanning. Mandat og retningslinjer», 1998

¹³ «Notat til RUFUs medlemmer for 1998-2001, i forbindelse med møte om oppsummering av erfaringer fra RUFUs første periode»

Global as Chair. The committee was to report to the central leadership, and given the following Terms of Reference:

- to develop a coherent strategy for research and doctoral education;
- to develop various strategic input on education and research; and
- to contribute to, and develop action plans for, strengthened collaboration between UiB and regional, national and international partner institutions, with an emphasis on institutions in the South.¹⁴

The committee was initially appointed for a period of three years, and in 2012, it was reappointed for an additional six month-period.¹⁵ It has functioned as an advisory body without any financial resources at its disposal.

Targeted research areas and strategic goals

The strategic priority area was initially referred to as development research, and understood as research on poverty and low-income countries/the Global South. Over the years, the thematic and geographical scope has become broader. UiB currently uses the term global and development-related research defined as:

*research that is relevant for dealing with the great challenges of the 21st century, and that is particularly relevant for understanding the background, inter-linkages and processes of change at global, regional and local level. This research includes studies of development as such and research for development.*¹⁶

The Strategic Committee for Development-related Research elaborates on the definition in a note prepared in 2010. It is stressed that development-related research goes beyond the study of developing countries as a geographical category, and covers research on global challenges and processes of change, e.g. related to poverty, human rights, health, climate, consumption, sustainable development and ethics. Cultural historical research and *longue durée* perspectives are also seen as highly relevant, and the committee underlines that it is a field of study that covers all faculties at the University.¹⁷

Cross-disciplinarity has been seen as key feature of the strategic priority area from the outset.

The definition makes the strategic priority extremely broad, covering many different disciplines and research areas, and in consequence the Panel found it impossible to apply consistent comparative evaluation criteria across the activities at UiB classified as being within the strategic priority area. As mentioned in the introduction, the Panel does not evaluate individual research units, but rather looks at the strategic priority as a whole across the University.

Goals for the strategic priority of global and development-related research and education have been set out in various documents over the past decade.¹⁸ Central strategic goals and measures have been to:

¹⁴ «Oppnevning av strategisk utvalg for utviklingsrelatert forskning», 2009

¹⁵ «Gjenoppnevning av strategisk utvalg for utviklingsrelatert forskning», 2012

¹⁶ Definition provided in the presentation of the strategic priority area global and development-related research at the webpages of UiB (in Norwegian: «forskning som er aktuell for å håndtere de store utfordringene i det 21. århundre og som er særlig relevant for å forstå bakgrunn, sammenhenger og endringsprosesser på globalt, regionalt og lokalt nivå.»), URL: <http://www.uib.no/forskning/75360/utviklingsrelatert-forskning>

¹⁷ *Evalueringsrapport Unifob Global*

¹⁸ The relevant documents the Evaluation Panel has been presented with are «Universitetet i Bergen – Et Forskningsuniversitet. Utkast til forskningsstrategi 2005-2010», UiB, 2004; «Innspill til strategisk handlingsplan for utviklingsrelatert forskning og utdanning ved Universitetet i Bergen», 2005; University Board documents, 2003-2011; and «Strategiske forskningssatsinger – status og utviklingstrekk: marin forskning og utviklingsrelatert forskning», 2008. While it has been part of the Terms of Reference for the Strategic Committee for Development-related Research to prepare a strategy for research and doctoral education as well as action plans for external collaboration, no such documents have been produced to the knowledge of the Evaluation Panel.

- develop thematic focus areas where cross-disciplinary research is concentrated in large, strategic projects;
- develop broad development-related research communities and cooperation within the social sciences and humanities;
- strengthen two to three research communities with the aim to establish Centres of Excellence;
- strengthen scientific leadership;
- increase the number of researcher positions;
- establish research schools within the areas of international studies and global health; and
- strengthen the cooperation between UiB and the Chr. Michelsen Institute.

UiB Global has presented its own strategic plan for the period 2012-2015. According to the plan, “[t]he University of Bergen’s research on global development challenges shall be a critical and internationally recognised research field”. Central priority areas include collaboration with transnational global institutions such as UNESCO, WHO and other UN bodies; concentration of cross-faculty thematic research on a few selected multidisciplinary research areas; collaboration with the Chr. Michelsen Research Institute on Bergen Resource Centre for International Development; and fundraising from internal and external sources.¹⁹

Strategic funding

The strategic priority of global and development-related research and education has over the years been supported by earmarked scientific positions at all faculties and central strategic funding. Central strategic funds have, in the period of evaluation, been used to support positions, projects, programmes and research communities with the potential to achieve Centre of Excellence status within the priority area, as well as cooperation with the Chr. Michelsen Institute, the Bergen Resource Centre for International Development, and, from 2010, UiB Global. UiB has not been able to provide reliable figures for overall strategic funding in the period.

1.3 About the evaluation

Background and objectives

The current evaluation has been commissioned by the central leadership at UiB. The strategic priority of global and development-related research and education has been supported by the central strategies of the University for 25 years, and the current strategy states that a scientific evaluation of the strategic priority will be carried out in the strategy period (2011-2015).²⁰

According to the guidelines from UiB, the main objective of the evaluation is “to have a systematic review and assessment of the focus area Global and development-related research at the University of Bergen, such that this is delimited in understanding with the University. The evaluation is intended to provide a portrayal of the quality of the research and the educational programmes within this area. The evaluation must contribute toward learning and development for the academic communities, and provide insight into strengths, weaknesses and challenges for the research and educational programmes. The evaluation will be an important basis for decisions on how the focus area is to be pursued in the work on developing a new strategy for the University.”

UiB has started the process of developing a new strategy, which will be implemented from 2016.

The Evaluation Panel

The evaluation has been carried out by a Panel of six international experts appointed by UiB, cf. table 1.1.

¹⁹ *Strategic plan for UiB Global 2012-2015*

²⁰ *Strategi 2011-2015. Universitetet i Bergen*

Table 1.1 The Members of the Evaluation Panel

Name	Institution	Subject area
Jon Lovett (Chair)	School of Geography, University of Leeds, England	Geography
Beth Maina Ahlberg	Department of Women's and Children's Health, Uppsala University, Sweden	International Health, Sociology
Mary Amuyunzu-Nyamongo	The African Institute for Health and Development, Kenya	Global Public Health and Primary Care
Jonathan Friedman	Department of Anthropology, University of California, San Diego, USA	Anthropology
Flemming Konradsen	Department of International Health, Immunology and Microbiology, University of Copenhagen, Denmark	Epidemiology
Jane Wills	Department of Primary and Social Care, London South Bank University, England	Health Promotion

The Nordic Institute for Studies in Innovation, Research and Education (NIFU) provided the scientific secretariat to the evaluation, with researcher Siri Aanstad serving as scientific secretary.

The Terms of Reference

The Evaluation Panel was given the following Terms of Reference (ToR):

On the basis of the communities' academic production, the communities' self-assessments, written documentation of the communities' activities and visits to the institution, the academic panel is asked to:

- 1. On the basis of international standards to assess the quality and relevance of the scientific production within global and development-related research based on the combined production of publications and theses, with emphasis on the last 10 years.*
- 2. Evaluate the quality and relevance, including the development of expertise and level of execution, of the area's combined educational programs at the master and doctorate level with emphasis on the last 10 years.*
- 3. With the additional resources that accompany being a main focus area in mind, give a combined assessment of the strategic added value/utility this has provided.*
- 4. Evaluate the associated academic communities' cooperation with relevant academic communities in UiB's periphery, including organization, participation in projects, ability to generate resources and networking.*
- 5. Evaluate the associated academic communities' international activities, including developing expertise abroad ("impact"), project cooperation, participation in conferences, presentations, marketing and networking.*
- 6. Evaluate the associated academic communities' dissemination and promotion of their research results domestically and internationally.*
- 7. Consider to which extent cross-disciplinarity and organization in cross-disciplinary centres has contributed to strengthening and developing activities in the focus area.*
- 8. Assess utility value/function of the strategic committee for this focus area.*

9. Assess the associated academic communities combined administrative resources and support functions.

The Evaluation Panel was not given the explicit task of making a thorough scientific evaluation of the individual units involved in global and development-related studies at UiB. Given the number of research units involved, and broad scope of disciplines, this would be a formidable undertaking. Instead, the Panel has made an overall evaluation of the strategic priority area, based on general assessments of the individual units, and has made recommendations concerning the processes by which cross-disciplinary research in the strategic area can be encouraged.

The strategic priority area has a long history, which includes many actors and complex organisational changes. While the Panel has taken into consideration the main organisational developments in the period of evaluation, it has not delved into historical and organisational details. The evaluation has focused on the development of the strategic priority area over the last ten years (2004-2013) and in the analysis is primarily concerned with applying this past experience to potential future opportunities.

During the evaluation process the broad remit of research being addressed led the Panel to discuss definitions relevant to interpreting the Terms of Reference. A variety of terms were used to represent different levels of research groupings. During the interviews it became clear that similar terms were used to describe different groupings of researchers. To an extent this reflects changes in University priorities over time, and groups may shift between different types of association whilst retaining the same terminology. The following terms are used in the report:

Faculties are aggregations of departments of similar disciplines.

Departments are the basic disciplinary administrative unit of the University and are cost centres within which academic staff are employed and teaching programmes delivered. The staff have both teaching and research functions and may also be part of inter-departmental research groups, units or centres. Departments may host multiple disciplines and interdisciplinary centres.

Centres are formal structures initiated by the University to work on a particular subject area that may involve more than one discipline. They could be funded as a centre of excellence, be part of a faculty to facilitate cross-disciplinary work between departments, or established by the University and be accountable to the University board for interdisciplinary research across faculties.

Research groups, networks and clusters are used in the report to describe groups of researchers and students who voluntarily associate on topics of common interest. They are informal groupings that can arise spontaneously and do not necessarily reflect a strategic decision to focus research in a particular area. They can be within a discipline or across disciplines. Their open nature also readily enables inclusion of researchers from external organisations, which may include institutes, business and government.

The basic structure of a University consists of Faculties and Departments, and these structures tend to be long lived and the foundation of the educational programme. Centres and research groups are formed to address specific research topic areas, and may only exist as long as funding is available for that particular topic (see Section 6.3 for examples from other universities). The transitory nature of centres and groups can result in termination of investigation in a particular field, and staff redeployment or redundancy. This inevitably causes concern and controversy amongst the staff involved.

The Terms of Reference (1) requests analysis of quality and relevance of scientific production within global and development-related research. From the outset of the analysis the Panel perceived that there was a conflation in the meanings being used, between internationalisation, development and global as research perspectives. These terms were being used interchangeably during the interviews and it is clear that different research groups have differing perspectives, all of which are valid and reflect the nature of the research being undertaken. For example, the definition used by UiB for global

and development-related research cited above (Section 1.2) refers primarily to research that is "relevant for dealing with the great challenges of the 21st century". The Centre for International Health at UiB uses a definition similar to the one used in the recent process to develop a Norwegian research and innovation strategy for health and care services, Health&Care 21: "Global Health is an area for policy, research and practices that promote lasting improvements in the global public health and equalisation of unreasonable inequalities between countries and between social groups in the world. Global health emphasises transnational health topics, determinants and solutions; involves many disciplines in health sciences and outside; based on interdisciplinary and intersectoral collaboration in public health including health promotion, preventive and curative approaches"²¹ and this definition shapes the choice of research directions within CIH.

Adoption of the particular definitions below is purely for practical reasons, and does not reflect a value judgment on different uses of the terms, in what is an active and contested academic debate. For practical clarity within this report we have chosen to make a distinction between three types of activity that are reflected in the global and development activities of the University of Bergen.

Internationalisation refers to the practical activity of establishing partnerships, summer schools, training foreign scholars, capacity building through engaging in joint research etc. This is an important aspect of the operations of a highly ranked international university, but under the definition adopted here it is not categorised as global research *per se*.

Development is used here to refer to research activities that develop, in other words promote growth in production, incomes, infrastructure etc. In this case it is used specifically for research in Bergen that is directed towards development in the South, such as for poverty alleviation, livelihood enhancement, health improvement, crop improvement, pollution reduction and so on. The research may involve adapting a research output to the conditions of developing countries, but the developing country context is not specifically necessary for creating the research output. For example, analytical chemistry or optical physics can be used to solve specific problems in developing countries, but the fundamental techniques that are transferred arise in a developed country. There is a social expectation and moral obligation for knowledge and technology transfer from wealthy countries to poorer countries as outlined by international conventions and Norway's policy for development assistance.

Global research is used to refer to studies of activities that require research and cooperation between different countries, such as migration, climate change, epidemics, etc. that are global in scale. Global research can have major impacts when disseminated and taken up into policy or implementation. Far reaching global research receives international acclaim and is often published in high-ranking academic journals.

The Terms of Reference (4) refers to cooperation with relevant academic communities in UiB's periphery. There is extensive engagement with academic and non-academic partners locally, and also nationally and internationally. This leads to a blurring of the boundaries between the traditional functions of a university and those of the external cooperating partners. For example if a research centre is operating outside of the traditional university structures, then its research outputs may not contribute the overall outputs of the university, even though the centre is working closely with the university. The Panel recognised the following key functions of a university, which may contrast with partners (such as the CMI, government, business or industry):

- High quality research;

²¹ Translation by CIH from Norwegian: "Global helse er et område for politikk, forskning og praksis som fremmer varige forbedringer i den globale folkehelsen og utjevning av urimelige helseforskjeller mellom land og mellom sosiale grupper i verden. Global helse vektlegger transnasjonale helsespørsmål, determinanter og løsninger; involverer mange disipliner innen helsefagene og utenfor; baserer seg på interdisiplinært og tverrsektorielt samarbeid i et folkehelseperspektiv som inkluderer helsefremmende, preventive og kurative tiltak.", *Globale helseutfordringer*, delrapport HelseOmsorg21, 2014

- Research-led teaching;
- Creating skilled graduates to meet national needs (as reflected in the teaching programme, e.g. teaching in law will be focused on Norwegian law);
- Provision of advice to government, business and industry;
- Disseminate research results, engage with the relevant stakeholder communities for uptake of research and ensure societal impact;
- Have an international profile through research and internationalisation activities.

The Terms of Reference (7) refers to cross-disciplinarity. The divisions between disciplinary, cross-disciplinary and interdisciplinary research are contested. Research into different disciplines reflects the need to have deep and extensive knowledge of a single subject in order to effectively contribute to new knowledge in a particular field, or to provide high-quality teaching and advice. Universities are the main employers of disciplinary specialists and in this respect they play an important societal function. Cross-disciplinary research is often needed to respond to developmental challenges, for example technology transfer not only needs technical specialists but also social scientists to research the conditions for uptake and the effects of technology integration. Academic advancement often occurs when disciplines are juxtapositioned, for example principles from ecology and evolution have been applied in economics and vice versa. The definitions used by the Panel in the evaluation are:

Disciplinary research refers to accepted academic disciplines, and these are organised in departments within a university. There is a classical division into social and natural or physical science, the so-called “two cultures”. The departments often reflect these traditional disciplinary boundaries, but some departments, such as Geography, have both social and natural scientists.

Cross-disciplinary research occurs when researchers from the disciplines work together on a single problem, but their contribution to the research relates specifically to their own disciplinary fields.

Interdisciplinary research brings together different disciplines in a single integrated approach. There are different levels of interdisciplinary research. For example, integrated research bringing together chemistry and physics may be regarded as interdisciplinary, though it can be argued that both disciplines use a common set of assumptions and so represent the parts of the same discipline. More commonly the term is applied when disciplines using different underpinning theory are brought together, for example interdisciplinary research between economics and biology has led to major research advances in both fields (for example economics influenced Darwin in developing the theory of evolution, and evolutionary economics is now an accepted part of the discipline of economics).

The issue of delimitation: definition of global and development-related research and selection of research units

Global and development-related research and education is a broad field of study at UiB, and the strategic priority area has not been delimited in terms of specific disciplines or organisational units. To delimit the units and activities to be included in the current evaluation, the central leadership at the university consulted the faculties. A letter was sent to all six faculties, inviting them to “define what thematic research areas and associated organisational units/centres/research groups/research milieus should be included in the evaluation”. The letter gave the following description of the strategic priority area:

Global and development-related research is research that is relevant for dealing with the great challenges of the 21st century, and particularly relevant for understanding the background, interlinkages and processes of change at global, regional and local level. This research includes studies of development as such and research for development. Global and development-related research takes place at all our Faculties, most departments and at several specialised Centres,

*often in cooperation with institutions outside of Norway. It includes both basic research and applied research, and is organised in research groups based in the relevant research units.*²²

A high number of research areas and units was reported back from the faculties and/or their respective departments/centres. The reporting was characterised by great variation, not least with regards to the nature and size of research units which ranged from departments/centres and research groups to projects and individual researchers. All in all the reporting covered units at 23 departments/centres and all six faculties.

These 23 departments/centres were asked to provide self-assessments of their global and development-related research and education activities. To make sure that the self-assessment template allowed for relevant reporting, the Evaluation Panel made an initial consultation with some of the departments. The feedback showed that the wide definition of the strategic priority area (presented above) made it difficult to delimit what research and education activities should be included. Thus, the Evaluation Panel asked UiB to provide an alternative definition that would give the evaluation units clearer guidance as to what activities to report on in the self-assessments. UiB presented the following definition, which was included in the self-assessment template and has formed the basis for the units' reporting:

The focus area embodies important global and local challenges for poor countries and the basic needs of humans, opportunities and processes for development related to these challenges, and human rights, resource issues and sustainable development.

A total of 20 units handed in self-assessment reports. Of the remaining three units, two were covered by the self-assessments of other units and one informed the Panel that it did not see it as relevant to be part of the evaluation.

Thus, the evaluation has covered 22 units, listed in table 1.2 below, and the delimitation rests on the departments' and research units' decisions to participate and their interpretations of what is included in the field of global and development-related studies.

²² Letter from the central leadership of UiB to the Faculties of Social Sciences; Mathematics and Natural Sciences; Medicine and Dentistry; Humanities; Law and Psychology, 30.05.2014

Table 1.2 Departments/centres included in the evaluation

Department/centre	Faculty
Centre for the Study of the Sciences and the Humanities	Humanities
Department of Archaeology, History, Cultural Studies and Religion	Humanities
Department of Foreign Languages	Humanities
-	Law
Department of Biology	Mathematics and Natural Sciences
Department of Chemistry	Mathematics and Natural Sciences
Department of Earth Science	Mathematics and Natural Sciences
Department of Physics and Technology	Mathematics and Natural Sciences
Centre for International Health, Department of Global Public Health and Primary Care	Medicine and Dentistry
Department of Clinical Dentistry	Medicine and Dentistry
Department of Clinical Medicine (K1)	Medicine and Dentistry
Department of Clinical Science (K2) ¹⁾	Medicine and Dentistry
Department of Education ²⁾	Psychology
Department of Health Promotion and Development	Psychology
Department of Administration and Organisation Theory	Social Sciences
Department of Comparative Politics	Social Sciences
Department of Economics	Social Sciences
Department of Geography	Social Sciences
Department of Information Science and Media Studies	Social Sciences
Department of Social Anthropology	Social Sciences
Department of Sociology	Social Sciences
UiB Global	-

Comments: ¹⁾ covered by the self-assessment of the Centre for International Health (CIH)

²⁾ covered by the self-assessment of the Department of Health Promotion and Development (HEMIL).

Data sources

The evaluation has been based on several different data sources, of which the main part is data provided by UiB centrally and self-assessment reports from the research units:

- documents and data on the strategic priority area, provided by UiB;
- self-assessment reports from the relevant research units;
- a bibliometric analysis from NIFU; and
- site visit and interviews at UiB.

UiB was asked to provide the Panel with relevant documentation of the strategic priority of global and development-related research and education, as well as information about education, research and cooperation within the field. The Panel received a significant amount of qualitative and quantitative data. Qualitative data included documents from meetings of the University Board; previous internal mappings and assessments of the strategic priority area; strategy documents; information about the strategic committee; information on educational programmes and research schools; lists of bilateral collaborative agreements; and information on international networks.

The quantitative data consisted of university budgetary figures; NUFU funding figures; and study programme statistics (students, graduates, credits, grades).

Self-assessment reports from the units have been a key source of information. Based on a self-assessment report template, the units have provided both quantitative and qualitative data reflecting the Terms of Reference for the evaluation (see Appendix 1 for the self-assessment report template). UiB Global appended several documents to their self-assessment, including reports/evaluations providing information about organisational issues and key activities within the strategic priority area.

The Evaluation Panel conducted a three-day site visit at the University of Bergen in October 2014. During the site visit, the Panel interviewed representatives of both the Central and Faculty leadership, as well as the departments/centres that are included in the evaluation (see Appendix 2 for the interview plan).

Data limitations

The broad definition of global and development-related research at UiB, and the broad, bottom-up delimitation of the field for the purpose of this evaluation has, together with varying quality in the material the Evaluation Panel has received from the University, put some restrictions on the depth and detail of the current report.

UiB lacks a general overview of the scope and development of the activities within the strategic priority area, and the Panel has not been able to acquire encompassing figures on personnel, funding, students, etc. The bottom-up delimitation of global and development-related research and education has furthermore posed challenges in terms of supplementing the data from UiB with other data sources, such as national statistics on research and education, and bibliometric databases.

The self-assessment reports submitted by the individual departments/centres were of a somewhat uneven quality, and there is a possibility of double counting in the reports. The Evaluation Panel acknowledges that the timing of the reporting was not ideal, and the interviews helped fill out the information that was missing in the reports.

Finally, the Evaluation Panel would like to underline the broad scope of the task, which precluded detailed scientific assessments of the individual research units beyond a recognition of overall quality.

2 Research units, thematic areas and resources

2.1 Research units and thematic areas

Global and development-related research is covered by a large number of departments/centres and research groups across the University. It is not easy to make direct comparisons between the different areas of research in terms of publication outputs, levels of funding or impact, as there are different publishing traditions and sources of funding available. This diversity is also reflected in the research topics. Some research can be regarded as transfer of technical knowledge to developing countries, whereas other research can only be undertaken in a global or developing country context. The volume and range of research prevents us from dividing the research into these different categories. This section briefly reviews the main areas of research covered by the departments/centres arranged by faculty. Global and development-related research at UiB has a long tradition and is represented throughout the University, not only in fields with concentrations of researchers such as health, social anthropology and biology, but also in disciplines such as law and sociology, where the smaller number of researchers are able to collaborate effectively with the larger groups. Cross disciplinary units, such as UiB Global, have played an important role in providing logistical and infrastructural support to enable individual researchers to participate effectively in the strategic priority area.

Humanities

The Faculty of Humanities includes two Departments and a Centre. These are the Department of Archaeology, History, Cultural Studies and Religion (AKHR); the Department of Foreign Languages; and the Centre for the Study of the Sciences and the Humanities. AKHR hosts the Centre for Middle Eastern and Islamic Studies (SMI, previously located under the Faculty of Social Sciences), which acts as a network and intellectual grouping for 25-30 staff across disciplines. SMI does not have independent teaching or external funding, nor does it receive central funding but is identifiable and visible internally and externally, has a library housed with CMI and a part-time secretary and a director. In its written submission, the department states that the SMI provides a focus for researchers on the Middle East and Islamic world in the social science and humanities faculties. Besides SMI, AKHR also has a research group on “Transnational history and encounters” and identifies six research themes for its current work:

- Middle Eastern and Islamic studies;
- Global trading networks and their effects;
- The development of transnational networks in the ancient Near East;
- Sudanese studies;

- Trade, migration and cultural change in the Indian Ocean;
- Religious studies in developing world.

The Department of Foreign Languages has a Caribbean research group and two research projects on the linguistic expression of poverty and equity and the implications of this for policy making. The POLAME project is funded by the Research Council of Norway's Latin America Programme. It is part of the CROP programme that promotes social science research that theorises and provides understanding of poverty in a global context (cf. Section 5.3). The department interviewees spoke about the importance and centrality of area studies that incorporate linguistics, history, culture, literature and language and how degree awards from the department in for example, Spanish may actually be primarily historical or cultural inquiries.

Examples of global and development-related research at UiB, case 1:

Linguistics and Climate Change

The Department of Foreign Languages has been working on multidisciplinary perspectives on climate change. In the period 2009-2012 this group collaborated with researchers at CMI and in South-Africa on the interdisciplinary project "Climate Change Discourse, Rights, and the Poor: Scientific Knowledge, International Political Discourse, and Local Voices" (financed by NORGLOBAL; the Research Council of Norway). One of these linguists, Kjersti Fløttum, developed ideas from this project into a new interdisciplinary project, LINGCLIM – "Linguistic representations of climate change discourse and their individual and collective interpretations", financed by the SAMKUL-programme, the Research Council of Norway, 2013-2016. Researchers from four faculties at UiB are involved, in addition to researchers from the Norwegian School of Economics, Uni Research, NTNU (Trondheim) and guest researchers from France, UK and USA. The research engages with the following disciplines: linguistics, psychology, political science, climate/earth science and computational science. The general research question focuses on the role of language and communication in the climate change debate at both national and international level.

The Centre for the Study of the Sciences and the Humanities was founded 25 years ago and has survived as a centre hosted by the Faculty, but accountable to the University Board, with 7 staff and 8 doctoral and postdoc students. Its director described it as a "service institution". It generates significant funding and has three current thematic areas:

- Aquaculture and ethics: it is part of EU research on sustainable trade in ethical aquaculture (SEAT) between Asia and Europe. The Centre's work is on developing transparent sustainability measures for food production systems;
- Climate change/adaptation: the TRACKS project (Transforming climate knowledge with and for society) works in Bangladesh to understand how communities vulnerable to climate change can communicate use their own knowledge and that of climate science;
- GM products (animals): this is an EU project (the Public perception of genetically modified animals - Science, utility and society PEAGUSUS project) that examines the development, implementation and commercialisation of genetically modified (GM) animals and derivative foods and pharmaceutical products.

Law

Thematic areas relevant to global and development-related research in the Faculty of Law include Migration to Norway: Flows and regulations; Protection of civilian refugee camp environment; Legal frameworks for conservation of biodiversity and ecosystems services in the Himalaya (including a PhD student); and Law of international watercourses. There is also an interest in oil exploitation in developing countries. There are relatively few staff in the faculty working on global and development topics, and much of the work is done in collaboration with other departments.

Mathematics and Natural Sciences

The Department of Physics and Technology conducts development research in the form of technology transfer principally in the field of optics and remote sensing. The Department of Earth Science has themes around seismology, risk analysis and tsunami in a number of developing areas in Africa and Asia. The main themes of the Department of Chemistry are all related to natural product chemistry.

The Department of Biology has more extensive global and development-related research. At present, research at the department has been divided into seven areas including Biotechnology and microbial diversity; Environmental ecology and management; Fisheries ecology and management; Terrestrial ecology and aquatic (or fresh water) ecology; Aquaculture and fish health; Marine biodiversity; and Coastal zone management. Eleven of the thirteen groups under the department have been involved in global and development-related research activities during the evaluation period. The department is a result of the merger of several departments and centres including the Centre for Environment and Resource Management, which maintained a dedicated focus on development-related research and training across several departments at UiB, effectively functioning as a hub for such activities.

Networks and expertise have, to some extent, been maintained after the merger, but now the focus is upon activities within the department and much less on cross departmental and cross faculty activities. A development-related research strength is the research on ecology, biology and management of natural resources as it relates to poverty, health, food, water, democracy, environment and climate. Projects related to development research and training are often undertaken in consortia with a group of international partners, or centred on bilateral partnerships between UiB and a partner institution in the global south. The geographical focus of research has included Angola, Armenia, Bangladesh, Ethiopia, Egypt, Gambia, India, Ghana, Namibia, Nepal, South Africa, Sri Lanka, Tajikistan, Tanzania, Tibet, Uganda, Uzbekistan and Vietnam, with funding from several government schemes in Norway and some international funding programmes.

Medicine and Dentistry

Topics of global and development-related research in the Department of Clinical Medicine include oral cancer, histopathological diagnosis, diagnosis of tuberculosis lymphadenitis and orthopaedic trauma. Activities are mainly in Uganda, Sudan, Tanzania and Kenya. Research remains relatively focused within the area of clinical specialisation, with limited cross-disciplinarity. There is a range of funding sources, though grants are primarily from national funding schemes, including the western Norwegian regional health trust, Norad and NUFU. A considerable number of scientists and PhD fellows are dedicated to international health activities, and there is some collaborative work with other departments/centres within the faculty, including the Centre for International Health.

CIH at the Department of Global Public Health and Primary Care is dedicated to, and covers, many of the key topic areas of relevance to international health in low and middle income countries (LMIC), including the major disease and programming areas such as child health, HIV, malaria, nutrition, immunisation, reproductive health etc. The centre has a great diversity of partners especially in sub-Saharan Africa, but also Asia. In 2013, CIH was awarded a Centre of Excellence, the Centre for Intervention Science in Maternal and Child Health, which focuses on intervention science in collaboration with research institutions in Ethiopia, India, Nepal, South Africa, Uganda and Zambia. The centres and department combined comprise significant strengths of staff fully dedicated to international health (focusing upon health in LMIC). There is some funding to CIH from UiB through salary support to positions, administration etc. but after the Centre became part of the Department of Global Public Health and Primary Care in 2010 (cf. section 1.2), the funds from UiB became less directly linked with international health activities. It is difficult to assess how overall funding allocations have been affected, though less of the overhead generated by CIH is maintained within CIH. The Centre attracts major grants from funding schemes in Norway and is also an active partner in international research consortia as well as educational networks. Funding for research is often

combined with capacity development activities. CIH started in 1988 and was established as an interdisciplinary interfaculty centre; open for different topics within international health. CIH has had a clear strategy over the years to focus upon mother and child health and intervention studies. This strong focus has led to the establishment of a Centre of Excellence. CIH now has 12 professors: 1 dentist, 7 medical doctors, 1 health economist, 1 global nutritionist, and 2 anthropologists. The largest research group within CIH is within Ethics, Economy and Culture. The Centre has also had studies within occupational health in LMIC focusing upon respiratory health in dusty industries for 15 years, including two large NUFU projects. This research topic was strengthened by adding a professor in pulmonary medicine in 2013 to CIH enhancing an active focus on non-communicable diseases.

The Department of Clinical Dentistry has a limited number of scientific staff members involved with international health and development-related projects, and their engagement is primarily through supervision of MSc and PhD thesis projects. Areas of study have included, in relation to oral health, dental fluorosis and fluoride concentrations in drinking water and in the air; oral health promotion; dietary intake, socio-economic status, behaviour and oral health; and oral health status and Type 2 diabetes mellitus. Supervised work has centred on Uganda and Tanzania. The department also collaborates with CIH.

Psychology

Global and development related research at the Faculty of Psychology is mainly carried out at the Department of Health Promotion and Development, which also houses staff teaching on the Master's Programme in Gender and Development. One current staff member was previously employed at the Centre for Women's and Gender Research. Transfer of the Gender and Development Master's Programme to the Faculty of Psychology occurred in 2005, so for almost all of the period under scrutiny it has been at the Faculty of Psychology. Between 2005 and 2007/8 it was a separate section under the larger Department of Education and Health Promotion. Between 2007/8 and 2010, Gender and Development existed as a separate unit in terms of the teaching activities. Throughout the period GAD staff have been part of the Research group MC-venues. The Department of Health Promotion and Development was established in 2010 and offers educational programmes and research projects. It was previously a centre, known as the HEMIL centre established in 1988, with funding from the Norwegian Health Association (cf. section 1.2). The staff members involved in global and development related research at this Department, and the faculty at large, are by and large, gathered under the umbrella of the research group "Multicultural venues in health, gender and social justice". A few scholars from the Department of Education and the Department of Social Psychology are/have been affiliated to this research group. Inclusion of "Development" in the name of the Department of Health Promotion and Development is intended to indicate a view on global and development-related research that encompasses a "global perspective" on equality and equity, not specifically countries in the South. Most of the work has been centred on Africa but research has been/is also conducted in Latin America, Eastern Europe and Kurdistan.

There are seven main thematic areas within the research group that define existing work but which may not continue beyond the life of current projects:

- Perspectives on global and local responses to HIV/AIDS;
- Theory and method development;
- Social determinants of health in poor communities;
- Politics of development, gender and life worlds;
- Gender, generation and care;
- Policies to reduce health inequities; and a further theme that concluded in 2009, Political violence and participation.

The Department of Education is relatively recently established and groups its research into a theme of "Knowledge, Education and Democracy". Its focus is on the influence of global travel and migration on the education sector in Norway and Europe and so was not included in the report.

Social Sciences

The departments of Social Anthropology and Sociology conduct global and development-related research on migration, development issues, social movements, poverty and conditions of equality, cultural identity and tradition cultural transformations with respect to religion, ethnicity and class relations.

The Department of Sociology has Migration, environment and development as the thematic research area in global and development-related research. The major research project is entitled “Everyday state-society relations and social movements in Adivasi Communities, Western Madhya Pradesh, India”, funded as a postdoctoral project by the Research Council of Norway, 2009-2013.

The Department of Comparative Politics has a broad range of relevant topics and projects in the strategic priority area. The theme Democratisation, political institutions, political parties, elections, democracy promotion has had four major research projects in the period of evaluation: 1) Democratic consolidation in Malawi (NUFU, 2007-2011); 2) NOMAPRO (2007-2013, development of Masters at Chancellor College, Malawi); 3) Elections in Hybrid regimes (the Meltzer Research Fund); and 4) an internationalisation grant from the Bergen Research Foundation. In the theme Law and social transformation there have been two major research projects: 1) India's federal system (RCN, 2012-2015); and 2) PluriCourts (a Centre of Excellence hosted by the University of Oslo (UiO), RCN, 2013-), while in the theme Global welfare policies there have been three major projects: 1) Towards a new Chinese Welfare State: Chinese perceptions and distributive justice (2013-2017); 2) Sino-Nordic Welfare research Network (SNoW) (2011-2015); and 3) Norway-South Africa: Developing normative framework for effective and efficient social security provisioning: An institutional perspective (2001-2005). Relevant projects within other themes are: 1) Multicultural or indigenous representation (postdoc, RCN); and 2) Climate crossroads (with the Department of Media Science and Communications, RCN). In reflection the department notes that it is hard to categorise its global and development-related themes as a separate field. Such reflection is indeed important considering the critical need to view the global impact or challenges on development everywhere as indicated in the broad thematic areas and research projects in different continents. The department has been successful in attracting funding.

In the Department of Administration and Organisation Theory, governance and policy studies is a major focus. Relevant topics include administrative reforms and cultures in developing countries, the role of professions in institution building, land politics, health and education systems, climate policies and security issues. Staff members have also been active in establishing SANORD, which is a partnership of higher education institutions from all the Nordic countries and southern Africa, currently covering 42 institutions. Some major projects include: 1) Governance matters: assessing, diagnosing and addressing challenges of governance in Nepal (2007-2011); 2) Master's programme in Public Policy and Governance (MPPG) (2008-2012); 3) Policy and Governance studies in South Asia: Regional Master's and PhD programmes (2013-2018); and 4) Transition to sustainable energy systems in emerging economies: A South-African focused comparative project (2014-2017).

The Department of Geography has ten major relevant research topics: 1) Land use, biodiversity, food security and climate change in the Himalaya; 2) Gender and work in developing economies; 3) Small-scale fisheries, poverty alleviation and rural development in Africa; 4) Globalisation and local development processes; 5) Foreign direct investment in Latin America; 6) Social movements in Latin America; 7) Salmon industry and community development in Chile; 8) Environmental change and food security in Africa and Asia; 9) Systems dynamics; and 10) The history of water. There have been over twenty major research projects under these thematic areas in the period of evaluation.

Relevant topics in the Department of Economics include Global health; Foreign aid; Poverty; Sovereign debt; Foreign direct investment; and the International Monetary Fund. Two major research projects, carried out within the themes of Global Health and Sovereign debt respectively, are MAP:

Health Worker Motivation, Availability, and Performance (RCN, 2005-2013) and Responsibility for Foreign Debt: Theory and Empirical investigations (RCN, 2006-2008).

The Department of Information Science and Media Studies conducts global and development-related research within one thematic area, namely Mobile technology for health and demographic data collection in developing countries. Two major research projects in the period 2004-2013 are Open mobile electronic vaccine trials (OMEVAC) and Open-source software for data collection (OpenXdata). The department collaborates with partners in Ethiopia, India, Pakistan, South Africa and Uganda.

All the thematic areas and specific research projects in the social science departments are clear evidence of the broad and innovative work undertaken in the Faculty of social sciences in global and development-related studies.

Examples of global and development-related research at UiB, case 2:

Egalitarianism: Forms, Processes, Comparisons (ERC Advanced Grant)

ERC Advanced Grants allow exceptional established research leaders of any nationality and any age to pursue ground-breaking, high-risk projects that open new directions in their respective research fields or other domains. The project “Egalitarianism: Forms, Processes, Comparisons”, funded through an ERC Advanced Grant, contributes in fundamental ways to new understandings of global inequalities. It paves the way for a critical assessment of what “development” is and how it can be understood. The project (2014-2019) critically investigates not only the multiple aspects of empirical instances of equality and inequality but also the historical and contemporary points of departure for such approaches. Led by Prof. Bruce Kapferer, Department of Social Anthropology the research probes the foundations of thinking about societal development and dimensions of hierarchy and egalitarianism shaping such trajectories – in the global North as well as the global South.

UiB Global

The self-assessment stated that the “objective of UiB Global (formerly the Centre for Development Studies, Unifob Global) has been to undertake research, publication and dissemination with respect to challenges preventing a decent human life of people in the South”. The history of UiB Global and its former incarnations is complex, and is covered in Section 1.2. Its current form dates from 2010. The activities of this interdisciplinary unit are aimed at enhancing global and development-related research. In the self-assessment report UiB Global lists the following topic areas, supported by an impressive selection of publications: Biodiversity, Culture and global development, Cultural heritage and identity, Gender and care, Global health, Human rights and law, Latin America, Migration, Poverty, Religion, the Middle East, Water, and Critical development research. Since being reorganised in 2010 (see section 1.2) there has been a dramatic reduction in the numbers of academics/researchers at the unit, with most research now being undertaken by affiliated researchers in departments.

The unit has administered the projects at the University of Bergen funded by the Norwegian Programme for Development, Research and Education (NUFU, 1991-2012), and UiB had the largest portfolio of NUFU projects of all academic institutions in Norway (cf. section 2.3). With respect to the new Norwegian Programme for Capacity Development in Higher Education and Research for Development (NORHED), the University of Bergen still has the most significant portfolio, currently 13 different projects, but the majority of these are now administered by the cooperating institutions in the South. However, the unit still functions as a focal contact point for the cooperation between UiB and the partner institutions. UiB Global also submitted a separate evaluation document for the Comparative Research Programme on Poverty (CROP), which is a cooperation between the International Social Science Council (ISSC) and the University of Bergen. CROP was established with a secretariat in Bergen in 1993 to promote social science research leading to an understanding of poverty in a global context. In 2009 the ISSC signed an agreement with UiB incorporating CROP into

the university's academic and administrative environment. CROP is discussed further in sections 2.4 and 5.3.

2.2 Personnel

Table 2.1 below shows the development in academic personnel within global and development-related studies over the past ten year-period based on the units' own reporting. Of the 20 departments/centres the Evaluation Panel has received self-assessments from,²³ 15 have provided figures for the total number of staff involved in research and/or teaching in the field, and 14 figures for the number of staff involved in the field more than 50 per cent of their time. Hence, data are far from complete, but may still give an indication of the general development in UiB staff involved in global and development-related studies.

The overall figures indicate a notable increase in the number of staff members involved in the field. In 2004, the units report that they had 70 staff members involved in the field more than 50 per cent of their time, whereas in 2013 this figure had increased to 101 staff members. Also including staff members involved in global and development-related studies smaller parts of their time, UiB had 166 staff members in the field in 2013. Most of the increase came in the first years, from 2004 to 2008, whereas after 2008 there have been smaller fluctuations in the staff numbers (between 100 and 107 involved in the field more than 50 per cent of their time).

Most of the staff involved in the field are professors or PhD fellows. Measured in full time equivalents, there were 28 PhD fellows (FTEs) in the field in 2004, increased to 40 in 2013. The number of professors increased from 54 to 76 FTEs in this period. There was also a notable increase in postdoc fellows, from 8 in 2004 to 20 in 2013 (see table below).

Table 2.1 Academic personnel in global and development-related studies (research and/or teaching), 2004-2013

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	Info ¹⁾
Total number of staff involved	100.5	110.5	131.5	144.5	156.5	161	161.5	157	167.5	166.5	16
Number of staff involved in the field more than 50% of their time	70	74	82	93	100	106	103.5	105	107.5	101.5	14
Full time equivalents (FTEs) in the field:											
Professors (<i>professor/førstemanuensis/andre førstestillinger</i>)	54.3	57.8	64.8	64.8	67.3	69.35	71.95	72.7	73	75.5	16
Other permanent academic staff	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	4
Postdoc fellows	8	7	9.1	6.8	8.3	8.3	11.1	12.1	20.25	20.05	12
PhD fellows ²⁾	28	31	32.3	43.7	42.1	44.7	39.6	43.5	50	40.3	14

Source: Self-assessment reports

¹⁾ Number of units which provided information.

²⁾ The table includes the positions specified in the self-assessments. This may to varying degree include externally funded PhD fellows. E.g. CIH only included PhD fellows funded by UiB, and added a note that if including all PhD students regardless of funding, the figure would be much higher (48 vs 3 at CIH in 2013).

From the reported figures, four units stand out as the largest environments in terms of staff members in global and development-related studies (see Appendix 3 for a full overview of reported staff by units and years):

- Centre for International Health (with 31 involved staff members and 18 involved more than 50 per cent in 2013);
- Department of Health Promotion and Development (23 involved staff members and 14 involved more than 50 per cent in 2013);
- Department of Social Anthropology (21 involved staff members and 12 involved more than 50 per cent in 2013);
- Department of Archaeology, History, Cultural Studies and Religion (20 involved staff members and 17 involved more than 50 per cent in 2013).

²³ The 20 self-assessments cover 22 units, cf. section 1.3.

Moreover, the departments of Clinical Medicine (K1), Comparative Politics and Geography²⁴ all had more than 10 staff members involved more than 50 per cent of their time in the field in 2013. The other units which have reported number of staff members, appear to be smaller environments for global and development-related studies, with 5 people or fewer who were involved more than 50 percent of their time in the field in 2013. The largest of these was the Department of Biology, with 12 staff members involved some of their time and five staff members involved more than 50 per cent of their time (see tables in Appendix 3).

UiB Global has had a larger group of staff only in the middle of the period. The staff increased from 6 in 2004 to 23 in 2007 and dropped from 17 in 2010 to 6 in 2011. However, in terms of FTE professors and PhD and postdoc fellows, the UiB Global figures have been more stable – with around 2 professors and 1-5 PhDs or postdocs throughout the period.

2.3 Funding

UiB and the Norwegian university funding system

Direct government funding plays a major role in the Norwegian higher education sector, and accounted for 76 per cent of total funding at the University of Bergen in 2013.²⁵

UiB receives annual direct funding from the Ministry of Education and Research, consisting of two parts: a basic grant, which accounts for approximately 70 per cent of their direct funding from the Ministry, and a grant based on achieved results. The result-based grant is determined by a set of indicators related to education (student completion and mobility) and research (scientific publications, Research Council and EU funding, and PhD graduates). Funding based on the research-related indicators accounts for a relatively small part of the direct funding (9% in 2014), whereas student completion is a more important determinant of funding levels at the University (21% of UiB's direct funding for 2014).

It should be noted that teaching and PhD supervision in the South is not covered by the indicators determining the result-based grant, and that a large part of UiB's portfolio of activities in the South thus is not rewarded in the Norwegian university funding system. This is a disincentive for focus on the strategic priority area unless other external funds are generated by research activities in the South.

Like most of the Norwegian universities, UiB has introduced a local variant of the government funding model. This means that the internal allocation of funding at the institutions is partly based on the results of the individual faculties and their departments.

Funding for global and development-related research at UiB

Due to data limitations, it is not possible to calculate overall funding figures for global and development-related research at UiB. In the self-assessments, the units were asked to report their annual funding of research activities in the period 2004-2013. Only 8 of the 20 departments/centres provided figures for total funding, and many of these commented that it was challenging to generate the data and that figures were approximate. Six units provided no funding figures, whereas the remaining provided partial data. Concerning the institutional core funding spent on global and development-related research, several units commented that this would correspond with the number of academic staff involved the field (i.e. correspond with salary expenses/permanent staff), and they either entered number of staff members in the funding table or left it empty. In sum, overall data on

²⁴ This Department did not report their total number of staff members involved more than 50 per cent of their time, but reported 14 staff involved and in total 14 FTEs, and are therefore included here.

²⁵ *Facts & Figures 2013. University of Bergen*

funding for global and development-related research at UiB are not available, and the best indicator we have for the scope of the activity is the staff overview given in the previous section.

It is worth noticing that only two units, the Department of Health Promotion and Development (HEMIL) and the Department of Clinical Medicine (K1), provide figures for funding received from UiB's strategic priority of global and development-related research. HEMIL received 300,000 Norwegian kroner (NOK) in 2008, and K1 100,000 NOK both in 2012 and 2013. K1 reports that their funding was seed money from UiB's Strategic Programme for International Research and Education (SPIRE). It is, however, clear from the qualitative reporting in the self-assessments that other units have received strategic funding as well, mainly in the form of academic positions.

Central external funding sources for global and development-related research at UiB in the period of evaluation include the Research Council of Norway (RCN); the Norwegian Programme for Development, Research and Education (NUFU) funded by the Norwegian Agency for Development Cooperation (Norad); other Norad programmes; and initiatives of the Norwegian Ministry of Foreign Affairs (aid schemes and stipends).

In their self-assessments, 15 units reported that they had received some funding for global and development-related research from RCN the last ten years. For 11 of these, RCN was the largest external funding source for research in the field. We lack recent figures for overall RCN funding for global and development-related research at UiB, but the annual average was approximately 27 MNOK in the beginning of the evaluation period (2005-2007). This accounted for approximately 6 per cent of total RCN funding at UiB. In comparison, the other strategic priority area, marine research, accounted for close to 40 per cent of total RCN funding in the period.²⁶

Thirteen units reported in their self-assessments that they had received funding from other public Norwegian sources, such as the Ministry of Foreign Affairs and Norad. Generally, the NUFU programme has been an important funding source at UiB. The programme, which ended recently, supported partnership-based academic cooperation between Norway and developing countries with a focus on research, education, capacity building and institutional development. NUFU has been replaced by a new Norad initiative, the Norwegian Programme for Capacity Development in Higher Education and Research for Development (NORHED).

Ever since NUFU started up in 1991, UiB has been the institution receiving most funding from the programme.²⁷ In the final programme period, 2007-2012, the University had a total of 33 projects with an overall budget of more than 104 MNOK, cf. the full list of projects included in Appendix 3. The total budget frame for the programme in this period was around 400 MNOK.²⁸ It should be noted, however, that the 33 projects at UiB were not fully-funded by NUFU. The Centre for International Health was the unit with the largest NUFU-project budget in the period (c. 33.8 MNOK), followed by the Department of Biology (c. 24.4 MNOK) and Unifob Global/UiB Global (c. 20.5 MNOK).

Private domestic sources (industry or NGOs) and funding from abroad appear to be of less importance for funding of global and development-related research at UiB. In their self-assessments, eight units reported some funding from abroad the last ten years, and three²⁹ units reported some private funding. For both sources the amounts received are relatively small.

We lack current figures for EU funding of global and development-related research at UiB, but the relatively small amounts of funding from foreign sources reported in the self-assessments indicate that the levels are quite low. Available data for UiB's participation in the EU 6th framework programme

²⁶ «Strategiske forskningsatsinger – status og utviklingstrekk: marin forskning og utviklingsrelatert forskning»

²⁷ «Strategiske forskningsatsinger – status og utviklingstrekk: marin forskning og utviklingsrelatert forskning»

²⁸ Web pages of the NUFU-programme, URL: [http://siu.no/eng/Front-Page/Programme-information/Development-cooperation/NUFU/\(view\)/3531](http://siu.no/eng/Front-Page/Programme-information/Development-cooperation/NUFU/(view)/3531)

²⁹ These were the Centre for International Health, the Department of Health Promotion and Development, and the Department of Earth Science.

(2002-2006) shows that funding for global and development-related research amounted to 7.2 MNOK, or 6 per cent of total UiB funding.³⁰

Both the Research Council and EU funding is rewarded in the Norwegian model for result-based university funding, and the Ministry of Education and Research has a strong focus on mobilising Norwegian research institutions to take part in Horizon 2020. The ambition is to attract two per cent of total competitive funding, which will require a significant increase in Norwegian participation – of as much as 60 per cent – compared with FP7.³¹

2.4 Administrative resources and support functions

The main responsibility for providing administrative resources and support functions for global and development-related research and education at UiB is placed at the level of the individual faculties and departments. They give general support, however, and do not necessarily have specialised administrative competence within development-related studies.

At the central level, the Division of Research Management in the same way offers general support for project development and internationalisation of research. The Division is responsible for facilitating participation in international programmes and networks, and for managing relationships with UiB's international collaborative partners. The Division of Student Affairs is responsible for administering international student mobility, including UiB's participation in the Quota Scheme which supports students from developing countries in the South and selected other countries who want to study for a degree in Norway. The Division has also administered UiB's participation in Norad's Programme for Master's Studies (NOMA), a programme aimed at promoting development in the South based on the establishment of Master's Programmes. NOMA will be ended as a separate programme after 2014, and integrated into the new NORHED programme (cf. section 2.3).

The Division of Research Management has served as secretariat to the Strategic Committee for Development-related Research.

UiB Global is, as described in Section 1.1, a cross-faculty unit responsible for facilitating multi- and trans-disciplinary cooperation within the strategic priority area global and development-related studies. It supports activities across departments and faculties involved in the field at UiB, and offers, among other things, office space for guest researchers, seminar room facilities, etc. The unit moreover runs the Bergen Resource Centre for International Development in collaboration with the Chr. Michelsen Institute. It also runs several research programmes and research related activities, and there are dedicated administrative positions linked to the Comparative Research Programme on Poverty (CROP), the Nile Basin Research Programme (NBRP) and Bergen Summer Research School (BSRS).

While UiB Global was established in 2010 as a replacement for Unifob Global, it has not had the same role as its predecessor. A key function of Unifob Global was to be an administrative tool for externally funded research projects within global and development-related research at UiB, but when the unit was closed down, this function was decentralised and transferred to the university departments.

In the self-assessments, the units were asked to report on the adequacy of administrative resources and support functions available to them. The 11 units that report on this topic are overall satisfied with the general support provided by their department and/or faculty. Still, it is pointed out that the administration of research and education within global and development-related studies requires specialised skills and competence, related e.g. to participation in collaborative projects with institutions in the South and receiving visiting students and researchers from all over the world. Such specialised administrative competence is said to have existed at Unifob Global and its predecessor, the Centre for

³⁰ «Strategiske forskningssatsinger – status og utviklingstrekk: marin forskning og utviklingsrelatert forskning»

³¹ *Strategi for forsknings- og innovasjonssamarbeidet med EU. Horisont 2020 og ERA*

Development Studies, but to have “dissipated and disappeared” when the unit was closed down and the administrative functions decentralised to the department level.

3 Scientific production

3.1 Bibliometric analysis

A bibliometric analysis has been carried out as a background study for the evaluation. The main purpose of the study has been to provide a macro view on the development of global and development-related research at UiB. Main issues analysed include: publication output, discipline profile, institutional contribution, citation rates, and international collaboration. In this chapter, we provide a summary of the full analysis that can be found in Appendix 4.

The study is based on two main data sources, the publicly accessible database CRISTin and the Web of Science by Thomson Reuters.

It should be noted that the bibliometric analysis is carried out as a separate study, independent of the other parts of the evaluation. This means that there are some differences in the way global and development-related research have been delimited. For example, the natural sciences have not been included in the bibliometric analysis (cf. text box below). Moreover, UiB Global is poorly covered by the analysis, due to missing data registered in CRISTin. These factors are important to take into consideration when interpreting the results. The bias in coverage is illustrative of the difficulty in assessing such a broad range of disciplines as it is not possible to make direct quantitative comparisons.

All publications were classified according to scientific areas, using the following broad categories: Medicine & health (covering research within human life sciences spanning from molecular biology to public health and psychology), social sciences and humanities.

Natural scientific global and development-related research

The bibliometric analysis is a separate survey, completely independent of the work done by the Panel. The publication analysis was conducted prior to work of the Panel and the delineation of the field was not discussed. In the bibliometric analysis, global and development-related research was interpreted as natural sciences would not fall into the definition underlying the evaluation. Therefore, the natural sciences were not included. Nevertheless, several departments at the Faculty of Mathematics and Natural Sciences have reported conducting global and development-related research.

In order to assess the publication volume of the natural scientific research, which has not been included in the analysis, a minor additional survey was carried out. Based on the publication lists submitted for the evaluation, we identified central scientific and geographical terms and used these as terms in a literature search. This analysis identified approximately 210 articles published during the period 2004-2013. This means that the total publication output presented in the report would have increased by one fifth if the natural scientific research had been included. The Department of Biology accounts for the largest share of these publications, but we also find a considerable number of articles from the Department of Earth Science. There are several departments with a smaller number of articles, such as Geophysical Institute, Bjerknes Centre for Climate Research, Department of Chemistry and Department of Physics and Technology.

Results

The results shows that in total almost 1000 research publications within the field have been published by UiB employees during the 10 year period 2004-2013. The number has increased significantly, from less than 100 publications annually during the first years to approximately 170 publications in 2013, cf. *) Publications within the natural sciences have not been included in the study.

. In terms of publication points, the increase is also strong (lowest in 2004 with 37 points and highest in 2013 with 130 points).

Figure 3.1 Number of publications and publication points, global and development-related research, UiB, 2004-2013.

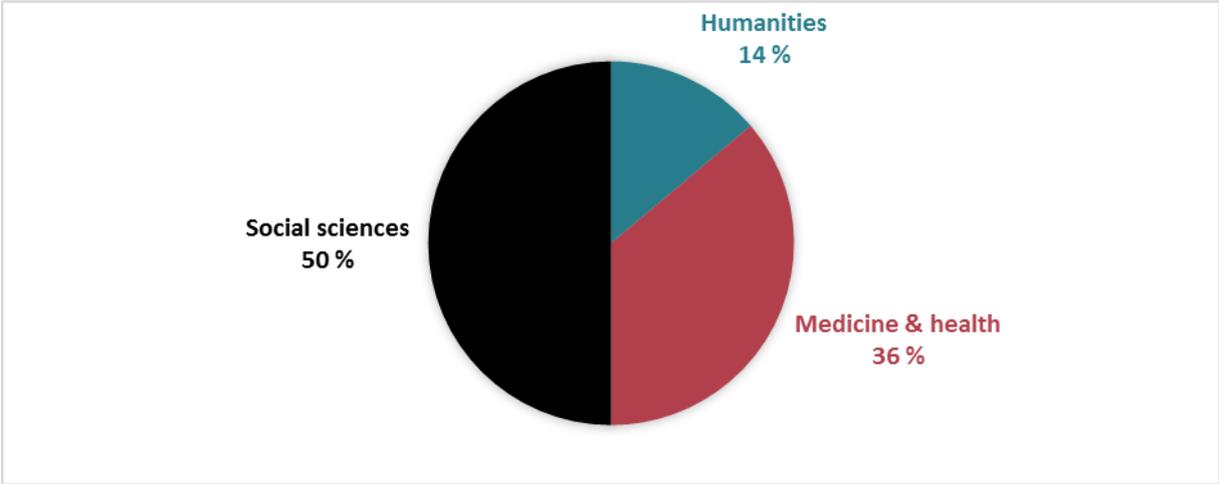


*) Publications within the natural sciences have not been included in the study.

Global and development-related research accounts for 6.4 per cent of UiB’s total publication output in 2013 (based on publication points). In other words, the analysis documents that UiB has a distinct profile towards global and development-related research. During the period 2004-2013 the annual proportion has increased significantly (from 2.5 % in 2004). This means that the relative growth in publication numbers in global and development-related research has been much stronger than in other areas.

The social sciences account for half of the global and development-related research output (Figure 3.2, total for 2004-13). Medicine and health has a proportion of 36 per cent while the figure is 14 per cent for the humanities.

Figure 3.2 The scientific profile of global and development-related research, proportion of publications* by discipline, total 2004-13.

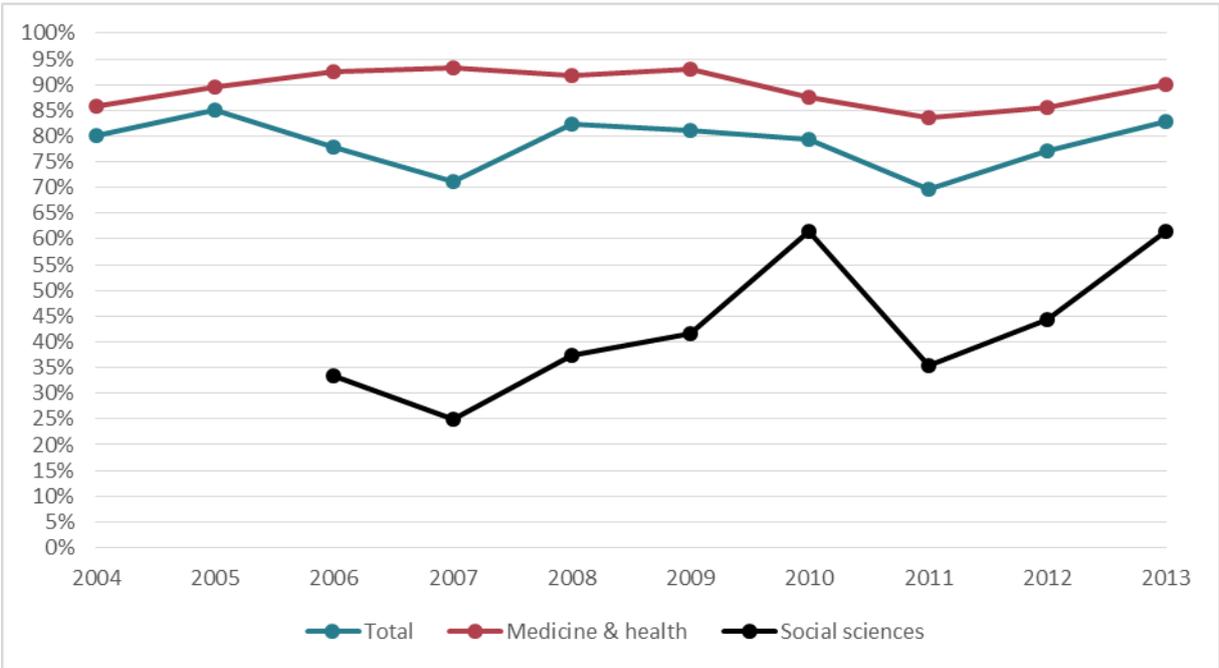


*) Based on publication points. Publications within the natural sciences have not been included in the study.

International cooperation

The collaboration profile of UiB’s global and development-related research has been studied based on data on international co-authorship (i.e. publications with author addresses both from UiB and other institutions). Of all the global and development-related research publications (2004-2013), 78 per cent had co-authors from other countries. Thus, the extent of international collaboration is wide, apparently involving the large majority of the global and development-related research. The proportion of international collaboration has varied from 70 per cent to 85 per cent during the 10-year period (Figure 3.3).

Figure 3.3 Proportion of articles with international collaboration,* global and development-related research, 2004-2013. Total, medicine & health and social sciences.



*) Only articles indexed in Web of Science are included in the calculations. Publications within the natural sciences have not been included in the study.

Table 3.1 shows the frequencies of co-authorship for the nations that comprise UiB's main collaboration partners from 2009 to 2013 in global and development-related research, medicine & health and social sciences, respectively. In medicine & health, almost one quarter of the publications had co-authors from Tanzania, followed by South Africa and Uganda with 14 and 12 per cent, respectively. These figures clearly illustrates that a significant part of the UiB-research is carried out in close collaboration with colleges from development countries. In the social sciences, the figures are significantly lower. With the exception of the USA, which is the largest collaborating country, there are only a few publications included from each country.

Table 3.1 Collaboration by country 2009–2013. Number and proportion of the article production with co-authors from the respective countries.* Global and development-related research, selected fields (medicine & health and social sciences*)

Medicine & health			Social sciences		
Country	No articles	Proportion	Country	No articles	Proportion
Tanzania	70	23%	USA	12	16%
South Africa	43	14%	South Africa	4	5%
Uganda	36	12%	Nepal	3	4%
USA	31	10%	Chile	3	4%
Ethiopia	28	9%	China	3	4%
UK	27	9%	UK	3	4%
Sweden	21	7%			
Denmark	18	6%			
Zambia	18	6%			
India	17	6%			
China	10	3%			
France	9	3%			
Kenya	9	3%			

*) Only articles indexed in Web of Science are included in the calculations. Publications within the natural sciences have not been included in the study.

**) Only countries with more than 8 and 2 collaborative articles, respectively, are shown in the table.

3.2 The quality and relevance of scientific production

Metrics for the quality of scientific production are not comparable across the wide range of research disciplines represented by the departments evaluated as different subjects have widely different publishing traditions in terms of numbers of co-authors, length, citation rates and so on. Development research also brings its own peculiarities, for example some of the groups working on medicine in developing countries preferred to publish their research in local journals, thereby making it locally accessible, rather than highly cited international journals. The departments evaluated are grouped together by faculties. In the self-assessment report, the evaluation units were asked to list 5-10 publications per major research topic/research group. Not all the departments included publication information in their reports, and so are not discussed in this section. There is no doubt that global and development-related research at UiB is of a high standard across the departments/centres and research groups evaluated as assessed by the number of publications in peer reviewed journals, international reputation, impact and uptake of the research, and co-authorship with partners in the south demonstrating the level of collaboration, capacity building and relevance to the prioritised area of research.

Humanities

The Department of Archaeology, History, Cultural Studies and Religion has about 20 per cent of staff (17-20) active in development-related research. The output from the department is impressive with staff authoring chapters in major encyclopaedic texts in Islamic studies, book chapters and articles. It

is clear that there is significant expertise. Other themes, such as Sudanese studies or global trading networks include one author.

Law

The Faculty of Law lists thematic areas and publications by the researcher responsible for the theme and it is not clear to what extent the work is jointly produced. Two of those listed are PhD students, and some publications are in Norwegian, perhaps because a good deal of their work focuses on global migration and inflow of migrants into Norway and EU countries and the laws on migration.

Mathematics and Natural Sciences

The Department of Physics and Technology has a high standard of publication output associated with its technology transfer and development work on optics in Tibet. The Department of Earth Science has a strong publication record related to the study of earthquakes and related hazards, including seismology and tsunami research. In the Department of Chemistry there are relatively few researchers in a large department involved in global and development-related research, but they have produced a substantial number of publications on the chemistry of natural products and the department has been evaluated by the EU in very positive terms. The Department of Biology has a high production of outputs ranging from technical publications, articles in specialised journals to highly ranked peer reviewed scientific journals. The publications include national articles in languages other than English but with English abstracts. Articles range from topics at the microbial level to large scale natural resource management frameworks. Moreover the department has published on methods development, proposed management concepts and conceptual and policy contributions on the management of natural resources.

Medicine and Dentistry

The departments specific to health, dentistry and medical sciences maintain a high proportion of overall output related to global and development-related research at UiB. It is likely to be higher than for most comparable sized universities in Europe. The number of publications produced has increased steadily over the ten-year period under review. The Department of Clinical Medicine has long term collaborations, especially with Sudan and Kenya, and has made important contributions to the understanding of the adverse oral cancer effects of khat and toombak that have formed the basis for interventional studies on oral cancer in these countries. Research has also documented good results and fewer infections after orthopedic trauma surgery in low resource settings than previously believed. Significant individual training activities, and a few at the institutional level, in the fields of immunohistochemistry, pathology diagnosis and training of surgeons, have been undertaken with partners in a number of countries including India, Kenya, Malawi, Sudan and Nepal. Contributions have also been made to development and teaching at MSc global health and MSc oral science programmes. The main channels of scientific publication are in good and well-established specialist peer reviewed journals.

The Centre for International Health and partners have conducted several large intervention trials, and have an impressive publication track record, including in high-impact journals. The research has made important contributions to international standard development, policies and programmes including in the fields of Neonatal and Childhood Illness and Mother and Child Health generally. There is consistent and high productivity of publications in good and well established specialised international peer reviewed journals related to e.g. breastfeeding, micro nutrition, HIV, malaria, occupational health and health services. There is a smaller focus on health problems emerging following epidemiological transition (e.g. diabetes, mental health) or related co-morbidity between infectious and non-infectious diseases. Significantly, the research corresponds with national priorities of southern LMIC partners. CIH has an impressive and long standing research and training partnership with a significant number of African partners leading to an impressive output in terms of individuals trained especially at the PhD level. The Department of Clinical Dentistry is not so strongly focused on development research (or

international health in this case). The publications seem rather driven by the interests of the supervised PhD or MSc students reflecting a diverse set of topics and the site-specific nature of the research, and have been published in relevant specialised peer reviewed journals. The addition of clinical dentistry is important in the fact that it broadens the research and training base at UiB in the field of international health.

Psychology

The Department of Health Promotion and Development is productive in the area of global and development-related research. Publication output is steady across all the active themes. Some themes are dependent on the work of PhD students (in Kurdistan) or individual professors (child malnutrition) rather than groups, and so these themes may not be sustainable in the long term. The definition of global and development related-research is clearly open to different interpretations. Although there is a range of publications from all staff, it is difficult to see a body of work under some of the themes that would provide an external reputation. This may be due to staff only including here work directly related to global and development-related research and the Panel was told that the selected publications may appear “random”. By contrast some of the publications included in the Policies to reduce health inequities theme do not focus on poor countries although it does focus on issues of welfare and thereby the “basic needs of humans, opportunities and processes for development” (cf. definition in section 1.3).

Conventionally, quality would be assessed through citation rates and international collaboration, an approach that is often criticised as it funnels research into narrow subject boundaries for publication in long-standing high-ranking journals. A strategic decision has been made to publish in African country-specific journals or open access. For example, the theme on HIV/AIDS primarily publishes in the African Journal of AIDS Research which has a low impact factor of 0.608 or BMC Public Health. The latter has a higher impact factor (of 2.32) but is open access and requires its authors to pay for publication (approx. 1675 Euros). Whilst the BMC journals are accepted as authoritative and reputable outlets and achievable outlets for research publications, this the payment requirements do have resource implications. Another outlet is the Scandinavian Journal of Public Health with an impact factor of 3.125 and ranked 10 out of 136 in the field of Public, Environmental & Occupational Health (Social Sciences Citation Index). None of this work is published in the higher impact international AIDS journals. As might be expected, work from the broad themes Social determinants of health in poor communities, Policies to reduce health inequities, and Gender, generation and care is published in a range of outlets, some of which have a high impact factor and some of which also use the BMC family of journals. A random selection of one paper from each theme with authorship by a professor found citations ranging from 1 to 27. Co-authorship is common and international collaboration with lower income countries is evident. One issue of note is that, contrary to other European and Australian universities whose publication output is monitored, there are no reviews published.

Social Sciences

The research quality and relevance of the work of the Department of Social Anthropology is very high by any international standards. The work on migration, on development issues, on social movements, on poverty and conditions of equality, on cultural identity and tradition in the contemporary world, are important contributions to research that is well regarded in the field. There is also much research dealing with cultural transformations in the contemporary world, with respect to religion, ethnicity and class relations. The department has also been successful in attracting research funding. There is a substantial knowledge resource base in the department and in its research networks.

The relevance and quality of scientific production is evidently clear also in the other five departments in the Faculty of Social Sciences. The Department of Sociology lists two monographs, five articles and three chapters clearly indicating their relevance to the priority area.

The Department of Comparative Politics has many publications in international peer reviewed journals as well as books on the various research themes with co-authorship with researchers from institutions in both the North and the South indicating a good deal of collaboration. Under the research theme Global welfare politics, there is an attempt to compare the experiences of welfare institutions in the Global North and South which may be necessary in not only mirroring and understanding global contexts, but indeed addressing the global challenges to welfare. In addition, a good number of books have been produced by all the research groups in the department. Besides these books, two text books - Politics in the Developing World, and Politics and Government in Malawi - have been produced in the period of evaluation. Relevance and quality is high, and efforts have been made to facilitate availability of research-based information in local libraries and integration of scholars, for example in the cases of Uganda, Zambia, and Malawi, into international political science networks.

The Department of Administration and Organization Theory has listed only books and book chapters, but co-authorship is evident in the material provided.

The Department of Geography has a very long list of co-authored publications mainly in international peer reviewed journals but also as book chapters in all the thematic areas. The relevance is high especially in raising awareness of the changing realities in climate, vegetation, ecology, mining and fishing. The coverage is extremely wide in terms of both geographical areas and disciplines represented, reflecting a vibrant and diverse culture of research within the department. Much of the work is strongly interdisciplinary in nature. Significant research areas that have produced a substantial quantity of high quality publications include: Land use, biodiversity, food security and climate change in the Himalayas; Gender and work in developing economies; Small-scale fisheries, poverty alleviation and rural development in Africa; Foreign direct investment in Latin America; Social Movements in Latin America; Salmon industry and community development in Chile; Environmental change and food security in Africa and Asia; System Dynamics; and History of water.

The research theme Global health at the Department of Economics has generated many publications in peer reviewed journals, while other thematic areas including Foreign aid, Poverty, Sovereign debt and the International Monetary Fund have listed two publications each, some of which are in manuscript form, working papers, or a book chapter. During the period of evaluation, the department has had a high level of publication activity within the priority area.

The Department of Information Science and Media Studies has listed four articles, three of which have been presented in international conferences, and a book on the research topic given in the self-assessment within the priority area. All the articles have a large number of co-authors.

UiB Global

The self-assessment report from UiB Global included an appended list of publications running to 101 pages. The enormous publication list reflects the unit's function, and former functions in previous configurations, as the central hub for interdisciplinary research on global and development-related research at the University of Bergen. The self-assessment report gives selected publications under the different research themes (see Section 2.1) and states that it was difficult to choose the most significant publications from the long list of published outputs, because of the overall high quality and relevance. The publications listed represent a wide variety of different types, with a high proportion of papers in well recognised peer reviewed international journals, in addition to other forms of scientific production including book chapters, monographs, conference proceedings and so on. Many of the publications given in the appended list are from the period of Unifob Global and thus not covered by CRIStin. Some of the publications will also be listed by the departments to which the researchers returned when Unifob Global was closed down.

4 Education at Master's and doctoral level

Global and development-related education at UiB includes training of students from developing countries as well as education in global and development-related issues. This chapter starts with a short introduction to the framework conditions for international students in Norway, followed by a presentation of the support schemes for the education of students from developing countries UiB makes use of (Section 4.1). It then provides an overview of Master's and doctoral level educational programmes and research schools in global and development-related studies at UiB (Sections 4.2 and 4.3), discusses the career trajectories of PhD candidates (Section 4.4), and assesses the quality and relevance of the education.

4.1 Education of students from developing countries

The Norwegian higher education system has so far been favourable to international students in the sense that there are no tuition fees for education in public universities and university colleges. This is true for both undergraduate studies, and education at Master's and doctoral level. However, reflecting developments in other Scandinavian countries, the current Government recently proposed to open up for the introduction of tuition fees for students outside the European Economic Area and Switzerland. The proposal was withdrawn as part of the budgetary negotiations between the Government and its supporting parties in the autumn of 2014, but it may still suggest future changes in Norwegian policy in this area.

Norway has several public development schemes supporting the education of students from the South, and UiB makes active use of these schemes to recruit students to Bergen as well as to contribute to education in developing countries. The University has over the years established several international study programmes with the explicit purpose of recruiting students with funding from Norwegian development schemes. Of the key support schemes presented below, the Norwegian Government's Quota Scheme provides funding for degree studies in Norway, whereas others are based on the so-called "sandwich-model" which means that students enrolled at an institution in the South come to Norway to study for a period before returning home to graduate.

The Quota Scheme provides financial support to students from developing countries in the South and selected countries in the East who want to study for a degree in Norway. The main objective is to contribute to competence building abroad, but the scheme is also intended to be used strategically by Norwegian higher education institutions to strengthen their international collaboration. Quota students are recruited through collaborative agreements between Norwegian institutions and institutions in the targeted countries, and UiB currently has agreements with a high number of institutions in Africa, Asia, South-America and Eastern Europe.

It can be mentioned that the Ministry of Education and Research commissioned an evaluation of the Quota Scheme in 2014. The evaluation report concluded that the scheme has limited effects on the internationalisation efforts of Norwegian higher education institutions, and that the institutions use the scheme only to a limited degree as an instrument to achieve their goals for international collaboration. The evaluation report was subject to public hearing in the autumn of 2014, and is currently under consideration by the Ministry. Any changes in the Quota Scheme as a result of the evaluation will be implemented in 2016.³²

Doctoral education has been a key component in the Norad-funded NUFU programme, which has supported education and research cooperation between higher education institutions in Norway and the South. UiB has had, as pointed out earlier, a large portfolio of NUFU projects in the period of evaluation, and many of the projects have allocated funds to PhD fellowships for candidates from the South. This has included fellowships for doctoral studies at UiB, as well as at institutions in the partner countries.

UiB has also participated in Norad's Programme for Master's Studies (NOMA) and the predecessor, the Norad Fellowship Programme. With the establishment of NOMA in 2007, the focus shifted from providing fellowships in Norway to students from developing countries, to contributing to the development and running of Master's programmes in the South.

NUFU and NOMA has recently been merged into the new Norad programme NORHED, that will continue the efforts to develop education and research capacity in the South by focusing on strengthening the higher education institutions.

4.2 Master's programmes

The documentation of the strategic priority area the Evaluation Panel received from UiB centrally included data on a total of eight Master's programmes within global and development-related studies. Five of the programmes belong to the Faculty of Social Sciences, and three to the Faculty of Medicine and Dentistry.

The programmes belonging to the Faculty of Social Sciences are:

- the Master's Programme in Public Administration, offered by the Department of Administration and Organization Theory;
- the Master's Programme in Development Geography, offered by the Department of Geography;
- the Master's Programme in System Dynamics, offered by the Department of Geography;
- the European Master's Programme in System Dynamics, offered by the Department of Geography; and
- the Master's Programme in Anthropology of Development, offered by the Department of Social Anthropology.

The four local Master's programmes have been offered annually, or biannually (Anthropology of Development), throughout the period 2004-2013. All programmes are taught in English and open to both international and Norwegian students. The majority of students are either students funded through the Quota Scheme (quota students) or international students with other funding.

The European Master's Programme in System Dynamics is a joint Master's delivered by UiB in cooperation with universities in Portugal, Italy and the Netherlands, with funding from the EU Erasmus Mundus programme.

The three programmes offered by the Faculty of Medicine and Dentistry are:

³² The web pages of the Ministry of Education and Research, URL: <http://www.regjeringen.no/nb/dep/kd/dok/hoeringer/hoeringsdok/2014/Horing---Evaluering-av-kvoteordningen.html?id=765134>

- the Master's Programme in International Health;
- the Master's Programme in Oral Sciences; and
- the European Master of Science Programme in International Health.

The Master's Programme in International Health, established around 1992 and coordinated by the Centre for International Health, is explicitly aimed at contributing to competence building in low income countries. The Master's Programme in Oral Sciences includes an introduction to international health, and has a strong focus on oral health in low resource settings. Quota students are a key target group for both programmes, but other, self-financing students may also apply.

The European Master of Science Programme in International Health is offered through membership in the tropEd Network for Education in International Health.

From the self-assessments of the evaluation units, it is evident that global and development-related studies take place within a much broader range of Master's programmes at UiB. A large number of departments across most faculties provides information on Master's level education within the field. However, due to great variation in how the units report on their educational activities, it is difficult to give an exact overview of relevant Master's programmes. Table 4.1 below is based on the information in the self-assessments, but since the reporting of several units is open to interpretation, the table only gives an indication of the size and composition of UiB's portfolio of Master's programmes covering global and development-related studies.

Table 4.1 Master's programmes covering global and development-related studies at UiB

Programme	Department	Faculty
Master's Programme in History	Archaeology, History, Cultural Studies and Religion	Humanities
Master's Programme in the Study of Religion	Archaeology, History, Cultural Studies and Religion	Humanities
Interdisciplinary Study Programme Master of Water Studies ¹⁾	Biology	Mathematics and Natural Sciences
Master's Programme in Aquaculture Biology ²⁾	Biology	Mathematics and Natural Sciences
Master's Programme in Biology, specialisation in Biodiversity, Evolution and Ecology	Biology	Mathematics and Natural Sciences
Master's Programme in Fisheries Biology and Management ²⁾	Biology	Mathematics and Natural Sciences
Master's Programme in Advanced Spectroscopy in Chemistry	Chemistry	Mathematics and Natural Sciences
Joint Master's Programme in Advanced Spectroscopy in Chemistry (Erasmus Mundus)	Chemistry	
Master's Programme in Chemistry	Chemistry	Mathematics and Natural Sciences
Master's Programme in Nanoscience	Chemistry	Mathematics and Natural Sciences
Master's Programme in Quality in Analytical Laboratories	Chemistry	Mathematics and Natural Sciences
Master's Programme in Seismology	Earth Science	Mathematics and Natural Sciences
Master's Programme in Physics, specialisation in Optics	Physics and Technology	Mathematics and Natural Sciences
Master's Programme in International Health	-	Medicine and Dentistry
European Master of Science Programme in International Health	-	Medicine and Dentistry
Master's Programme in Oral Sciences	-	Medicine and Dentistry
Master's Programme in Gender and Development	Health Promotion and Development	Psychology
Master's Programme in Health Promotion	Health Promotion and Development	Psychology
Master's Programme in Public Administration	Administration and Organization Theory	Social Sciences
Master's Programme in Comparative Politics	Comparative Politics	Social Sciences
Master's Programme in Economics	Economics	Social Sciences
Master's Programme in Development Geography	Geography	Social Sciences
Master's Programme in Geography, specialisation in Development Geography	Geography	Social Sciences
Master's Programme in System Dynamics	Geography	Social Sciences
Joint European Master's Programme in System Dynamics (EMSD)	Geography	Social Sciences
Master's Programme in Social Anthropology	Social Anthropology	Social Sciences
Master's Programme in Sociology	Sociology	Social Sciences

Comment: ¹⁾ Discontinued in 2008.

²⁾ Discontinued as a separate Master's programme from the autumn of 2014, but continued as an area of specialisation within the Master's Programme in Biology.

Source: Self-assessment reports

The distributed nature of Master's level education within the strategic priority area means that it is difficult to collect quantitative data on developments in student numbers and completion. UiB has provided the Evaluation Panel with student, graduate and credit (ECTS) figures for the eight Master's programmes at the faculties of Social Sciences and Medicine and Dentistry described at the beginning of this section. The figures cover the period 2004-2013, and are included in Appendix 5. However, as table 4.1 clearly shows, these figures are not representative for the combined Master's level education within the strategic priority area. While the share of students within global and development-related studies is likely to vary between the programmes in the table, the programmes offered by the Department of Biology and the Department of Health Promotion and Development (HEMIL) clearly play a central role both in educating students in global and development-related topics and in training Master's students from the South. The two Master's programmes at HEMIL – in Health Promotion and in Gender and Development – are both international programmes targeting quota students, and the

latter has for several years been the international programme at UiB with the highest number of quota applicants.³³

Unfortunately, the information provided in the self-assessments does not allow for the compilation of overall student and graduate numbers. To indicate how the numbers of students and graduates have developed in the period of evaluation, the available figures for the eight Master's programmes at the Faculties of Social Sciences and Medicine and Dentistry are presented below. Yet, it needs to be stressed that these programmes only constitute part of UiB's combined Master's level education within the field, and there is furthermore reason to question the robustness of the figures.³⁴ What this suggests, is that a central task for the University should be to develop routines for the systematic collection of data on the educational activities that are taking place within the strategic priority area.

Table 4.2 Students, Master's programmes in global and development-related studies at the Faculties of Social Sciences and Medicine and Dentistry, 2004-2013

	Public Admin.	System Dynam.	System Dynam. (Eur.)	Anthr. of Dev.	Dev. Geogr.	Int. Health	Int. Health (Eur.)	Oral Sc.	Total
2004	37	24	0	11	0	23	0	0	95
2005	42	32	0	8	4	36	0	4	126
2006	26	26	0	19	6	36	6	11	130
2007	30	25	0	9	8	30	5	12	119
2008	24	35	0	19	10	24	0	7	119
2009	23	39	0	6	12	32	0	5	117
2010	21	39	24	21	12	30	0	10	157
2011	23	39	20	16	11	33	6	9	157
2012	17	32	20	21	12	25	2	9	138
2013	18	41	24	19	16	25	2	6	151
Total	261	332	88	149	91	294	21	73	1309

Source: UiB

The figures for the eight Master's programmes show that there has been an overall growth in annual student numbers in these programmes between 2004 and 2013, from 95 to 151.

System Dynamics has been the largest Master's programme with a total of 332 students over the period of evaluation, followed by International Health (294), Public Administration (261), and Anthropology of Development (149). The total number of students in the two European Masters, in Systems Dynamics and International Health, has been 88 and 21 respectively.

The largest programme, Systems Dynamics, has together with the Master's programme in Development Geography, experienced an increase in student numbers since 2004. For both programmes, the increase was strongest in the years up to 2009. For other programmes student numbers have either been relatively stable (International Health) or fluctuating (Anthropology of Development and Oral Sciences), or – in the case of Public Administration – decreased, from 37 in 2004 to 18 in 2013.

Table 4.3 shows the development in graduates within the eight Master's programmes at the faculties of Social Sciences and Medicine and Dentistry.

³³ Self-assessment report of the Department of Health Promotion and Development (HEMIL)

³⁴ The evaluation units were given the opportunity to check the factual information in the report, and the Department of Social Anthropology corrected the number of graduates from the Master's programme in Anthropology of Development in 2005 from 0 to 15.

Table 4.3 Graduates, Master’s programmes in global and development-related studies at the Faculties of Social Sciences and Medicine and Dentistry, 2004-2013

	Public Admin.	System Dynam.	System Dynam. (Eur)	Anthrop. of Dev.	Dev. Geogr.	Int. Health	Int. Health (Eur)	Oral Sc.	Total
2004	9	10	0	0	0	10	0	0	29
2005	12	2	0	0	0	8	0	0	22
2006	8	6	0	4	0	13	0	0	31
2007	8	8	0	6	2	14	0	1	39
2008	12	11	0	4	6	11	0	1	45
2009	10	4	0	4	2	8	4	0	32
2010	10	18	0	10	7	7	0	0	52
2011	10	15	0	0	5	8	1	1	40
2012	15	11	19	15	6	13	0	4	83
2013	6	7	22	0	5	7	2		49
Total	100	92	41	43	33	99	7	7	422

Source: UiB

The annual number of graduates has increased in the period of evaluation, from 29 in 2004 to 83 in 2012. The numbers have fluctuated, however, and from 2012 to 2013, there was a drop to 49. For the period as a whole, the Master’s programme in Public Administration had the largest number of graduates (100), followed by International Health (99) and System Dynamics (92).

The production of credits within the eight Master’s programmes at the faculties of Social Sciences and Medicine and Dentistry has increased from 4188 in 2004 to 6270 in 2013 (cf. table C3 in Appendix 5). This is an increase of 50 per cent over the period. Total student numbers have increased by around 59 per cent (from 95 to 151). The Evaluation Panel has not received data on study progression at the individual student level, and preliminary estimates based on annual numbers of students and credits seem to show that the figures are not sufficiently robust for any conclusions on developments in study progression to be made.

Again, it is important to bear in mind that these eight programmes only represent part of the Master’s level education in global and development-related studies at UiB. To illustrate the role other faculties and programmes play, it can be mentioned that the two international Master’s programmes at HEMIL – in Health Promotion and Gender and Development – together had a total of 31 students in 2013, according to official student statistics.³⁵ Graduate figures provided by the Department show that 144 students have graduated from the programmes in the period of evaluation – 84 from Health Promotion, and 60 from Gender and Development.

4.3 PhD programmes and research schools

UiB has one institutional PhD degree, and offers the possibility of both disciplinary and cross-disciplinary doctoral studies. There are PhD programmes at all six faculties, and the self-assessments show that global and development-related doctoral studies take place within most programmes.

UiB has not been able to provide overall figures for PhD students or candidates within the strategic priority area in the period of evaluation. According to a previous mapping, 58 doctoral degrees awarded by the University in the period 2005-2007 were within global and development-related research, accounting for approximately 11 per cent of the total. The Faculty of Medicine and Dentistry

³⁵ The figures are from the Database for Statistics on Higher Education (DBH).

was responsible for close to 50 per cent of the doctoral degrees in the field, the Faculty of Social Sciences for 19 per cent, and the Faculty of Humanities for 16 per cent.³⁶

There are currently four research schools offering education within global and development-related topics at the University: Bergen Summer Research School, the Research School for International Health, the Research School in Public Health and Primary Care, and the Graduate School of Human Interaction and Growth.

The Bergen Summer Research School (BSRS) offers disciplinary and interdisciplinary research-based education addressing global challenges. It is organised as an annual summer school with parallel PhD level courses and joint lectures, and targets doctoral students and junior researchers from all over the world.

BSRS was started up in 2008 as a four-year collaborative project under the leadership of UiB and with three other higher education and research institutions in Bergen as partners: NHH - Norwegian School of Economics, Bergen University College and the Chr. Michelsen Institute. Later, Uni Research joined in. The project was initiated by UiB with clear reference to the strategic priority of both global and development-related research and marine research at the University.³⁷

Today, BSRS is administered by UiB Global. Many departments and faculties at UiB are involved in the summer school and contribute with courses on global and development-related issues. Since 2008, BSRS has offered a total of 39 two-week PhD courses to 580 PhD students from more than 70 countries.³⁸

The Research School for International Health at the Centre for International Health (the CIH Research School) offers a variety of courses on topics such as global health problems, the HIV pandemic, global nutrition, etc. The CIH Research School is open for all PhD students at the Faculty of Medicine and Dentistry, and includes courses and seminars for Master's students at CIH. There are currently 49 PhD students affiliated to CIH, and the Centre has produced around 65 PhD candidates in the period of evaluation (2004-2013).³⁹

Courses on global and development-related issues are to some extent also offered by the Graduate School of Human Interaction and Growth (GHIG) at the Department of Health Promotion and Development, and the Research School in Public Health and Primary Health Care at the Department of Global Public Health and Primary Care.

Medical students at UiB have been offered a course in global health since 2010, which includes both lectures on global health issues and an eight-week field visit in India or Africa. The Global Health Course is taught by staff at CIH, and has received education awards at UiB for its academic quality and contribution to highlighting global aspects of medicine.

4.4 The quality and relevance of the education

Traditionally, PhD students have focused on their research and received relatively little formal training. There is a worldwide trend to increase the level of taught courses in PhD programmes, particularly on research methods and transferable skills. The reason for this change in emphasis is a shift in the function of a PhD being more purely about the research itself, into a PhD being a qualification that signifies the ability of the PhD holder to create, conduct and supervise research programmes in general. This makes the qualification much more relevant to a range of career trajectories other than just continuing within academia. This is particularly relevant for students from LMIC, who may be returning to government or non-governmental posts with a policy or administrative role for research,

³⁶ «Strategiske forskningsatsinger – status og utviklingstrekk: marin forskning og utviklingsrelatert forskning»

³⁷ *Bergen Summer Research School – Global Development Challenges. BSRS 2008-2011*, report prepared by Kjersti Fløttum, BSRS, 2011

³⁸ Self-assessment report of UiB Global

³⁹ Self-assessment report of the Centre for International Health

rather than being a researcher themselves. Internationalisation of education is a central part of the operation of a globally highly ranked university, and new innovations such as use and integration of e-learning does not seem to have been a priority of the various educational programmes at UiB. Likewise, the scope of summer school activities seems modest. A potential source of vulnerability is over-reliance of some departments on student funding from the Quota Scheme. A change in policy with regard to funded studentships and fee payments could make some postgraduate education programmes unsustainable unless they are able to compete in the global market for students. Barriers to interdisciplinarity also detract from the relevance of education. Departments and research groups do not appear to be taking advantage of international training opportunities in the EU under Horizon 2020, such as Marie Skłodowska-Curie training networks. The current emphasis by major funding and administrative organisations on large interdisciplinary projects and policy means that students need to acquire skills at placing their research into an interdisciplinary context even if it is an in depth analysis within a single discipline.

Humanities

The Department of Archaeology, History, Cultural Studies and Religion offers relevant courses within the Master's programmes in History and Religion, and one PhD seminar in Middle Eastern Studies. Sixteen quota students from developing countries have completed a Master's programme at the department in the last decade, mainly in History and Archaeology, two of whom continued to PhD studies. A previous undergraduate programme in Middle Eastern Studies also fed students into the global (Middle Eastern) Master's studies. There are currently twelve doctoral students whose training programme is on methods and around the individual research project.

Law

During interviews the faculty explained that a new curriculum is currently under discussion, with the aim of incorporating international studies.

Mathematics and Natural Sciences

The Department of Physics and Technology has educational programmes clearly oriented to producing results and building capacity. The Department of Earth Science is focused primarily on internationalisation and the development impact on countries involved. There is training of researchers in those countries and the production of knowledge relevant to their conditions of existence, not least with respect to hazards. In the Department of Chemistry the relevance is of two types, internationalisation via training and cooperation and real impact. The Department has no specific programmes within global and development-related studies, but offers relevant education at Master's and PhD level for both Norwegian and foreign students. The Department participates in an EU wide training programme at the MA level in spectroscopy (awarded under the Euromaster label of the Bologna process).

The Department of Biology has, over the evaluation period, contributed or been responsible for four different relevant educational programmes: the Interdisciplinary Study Programme Master of Water Studies (discontinued in 2008); a Master of Science in Fisheries Biology Management; a Master of Science in Biology with specialisation in Biodiversity, Evolution and Ecology; and a Master of Science in Aquaculture. The department has also offered supervision of Master's and PhD students attracted through e.g. the Quota Scheme, country or university specific collaborative agreements (with the University of Makerere, Uganda; the University of Dhaka, Bangladesh; Tribhuvan University, Nepal; and the Armenia-Norway collaboration), or through Norad funded schemes. The department has contributed towards summer schools.

Medicine and Dentistry

Most of the departments at the Faculty of Medicine and Dentistry seem to rely on the Quota Scheme and students involved with educational activities through other forms of government grants. There

appears to be a limited number of students attracted from self-financed sources. The Department of Clinical Medicine offers specific input to the curricular of the Master's programme in International Health (MIH), Medicine, etc. This contribution is highly relevant and may represent a distinct difference compared with many of the other MIHs offered by European universities, presenting an interesting opportunity to specialise in the field. The Centre for International Health has a well-developed MIH programme that is a core activity providing links with educational partners in Europe and a wider international network. Although the total number of graduates on the MIH programme for the period 2004-2013 seems quite low (99), this is natural, as the Master's and PhD programmes at CIH are integrated. CIH has a number of scholarships every year, and the number of scholarships is reduced when a Master's student continues into the PhD programme (as PhDs take more years than a Master's). A high number of PhD graduates consequently means a low number of MIH graduates. The number of PhD graduates completing the research programme is thus impressively high. Organising PhD students into active research groups is clearly a sound strategy. The PhD research programme is under reform, aiming to move towards a more structured programme with fixed reporting structures and fixed courses. The fact that PhD students are offered Master's level courses may present a problem unless they are being offered the option of following more specialised courses at other departments. The international courses developed for the Medical programme seem highly relevant, but could be regarded an element of "internationalisation" of UiB more than more specifically development related training.

The Department of Clinical Dentistry staff provides inputs to the MIH programme, the Master's Programme in Oral Sciences and PhD supervision, and has offered relevant and novel topics of importance to international health. The aspect of fluorosis is clearly important and could form a really interesting case for interdisciplinary efforts. The inclusion of type II diabetes to the agenda will be of global importance and increasingly of relevance in the global South.

For the oral and international health related Master's programmes offered it seem less apparent that they contribute to the wider student body at UiB and in this way add towards "internationalisation" at the University. A review of the different Master's programmes offered by various departments under the Faculty of Medicine and Dentistry would be useful in order to consider a closer coordination aimed at maximising the use of resources. The existing international Master's programmes are vulnerable to changing policies within Norway that may reduce the number of government-sponsored international students, or in case the government decides to introduce a payment for non EU/EEA students. During the interviews, representatives from CIH did question the long-term sustainability and rationale of running international Master's programmes where students are based in Norway. The departments have not focused upon increasing the employability of graduates through systematic linkages with national or international stakeholders. This may well be because there is not an expressed need for such engagement, but may still be something that should be considered in preparation for the future, particularly if changes in arrangements for student funding means that the departments will be competing in the global market for students. Limited efforts have been made to provide support for internships. This may be due to lack of expressed interest by the students, but could be considered as an opportunity particularly if the number of Norwegian students or international students from the global north is increased.

Psychology

The Department of Health Promotion and Development offers two international Master's programmes: in Health Promotion and in Gender and Development, the former having started in 1994. Both programmes are stable in recruitment with 20 students, including 10 quota students (primarily from the global south for Health Promotion) and slightly smaller numbers for Gender and Development. There appeared to be no risk management strategy should there be future changes in quota funding, although non-quota applications were said to be 50-100 for each (biannual) intake of students. These Master's programmes have been used to recruit doctoral students who can transfer at the end of the first year. The Department staff has over the period of evaluation taught and supervised a number of

PhD students in the doctoral programme at the Faculty of Psychology with funding from the Quota Scheme, NUFU, the Research Council of Norway, the EU and university scholarships. A member of the Department contributed to the setting up of a Master's degree programme in Applied Social Psychology in Tanzania funded by NUFU which educated 100 graduates. The Department staff has also contributed to the Bergen Research Summer School, and to Master's and PhD courses at the Centre for International Health and the Department of Geography.

Social Sciences

The educational programmes in the Departments of Social Anthropology and Sociology are impressive and have kept up to date with theoretical discussions as well as issues relevant to global and development issues. There is an excellent milieu, engaged faculty and excellent results as can be seen in the recent theses. Also worth noting is the high percentage of students from outside Europe and the United States.

The Department of Comparative Politics has Master's courses on five thematic areas and a PhD course on political transformation in Latin America.

The Department of Administration and Organization Theory indicated that the number of applicants to the Master's Programme in Public Administration has been high, although the phasing out of the Norad Fellowship Programme has negatively affected funding for the students. Between 2004 and 2009 the Department of Sociology offered the Master's level course Global Development: Histories, Meanings and Politics. In the autumn of 2014, it offered the Master's level course Migration, Environment and Development focusing on critical development research, but unfortunately the course was cancelled for lack of interest among students. The Department contributes to the Bergen Summer Research School where one staff member has participated as a course organiser in 2012 and 2014. The Department of Information Science and Media Studies has also contributed to the Bergen Research Summer School, and highlights the relevance of the Department's ICT education to the community level, as exemplified by the return of a PhD candidate to Makerere University.

The Master's Programme in Development Geography was established before 2004 by the Department of Geography under the title Resource Management and Environmental Effects in Developing Countries. Recruitment of students and completed degrees have increased during the last 10 years. The total number of Master's students who graduated from the Department of Geography in the period 2004-2013 was 228, and of these, 78 (c. 35 per cent) fall under the category of global and development research. The Department of Geography contributed to the NOMA-project Regional Master's Programme on Biodiversity and Environmental Management (2008-2014), which produced 36 Master's students who took their degree at Tribhuvan University, Nepal, including one Indian and four Chinese students. The Department of Geography and the University Museum of Bergen have also organised the doctoral course 'The Global Food System' for the 2013 Bergen Summer Research School.

UiB Global

In the period 2003-2007, the predecessors to UiB Global administered the Norad Fellowship Programme for 56 Master's students at six different departments at UiB. The more recent Bergen Summer Research School produced and disseminated research-based education to address key global challenges. BSRS aims to offer high quality disciplinary, interdisciplinary and problem oriented research-based education to doctoral students and junior researchers from all over the world, as well as to form an international platform for discussion and dissemination of new perspectives on key global challenges. It started as a pilot project in 2008 and is now a fully integrated part of UiB Global and in the overall strategic priorities of PhD education and internationalisation at the University of Bergen. The BSRS is a joint venture under the leadership of the University of Bergen with the Norwegian School of Economics and Business Administration, Bergen University College, Chr. Michelsen Institute and Uni Research. In the period 2008 – 2014, the BSRS has provided 39 doctoral

courses, each of two weeks duration, with a total of 580 PhD students from all over the world. The participants include students from 87 different nationalities, arriving from educational institutions in 74 countries worldwide. The largest group of international students came from cooperating institutions in Uganda (46 students); while students from Ethiopia (29), Sudan (25), USA (25), India (24), Nigeria (21) and Tanzania (19) also participated in a notable manner in the period 2008-2014. UiB Global and its predecessors provided administrative support to the many NUFU projects at UiB.

4.5 Career trajectories of PhD candidates

Education and training of postgraduate students is a fundamental part of the activities of an international research-led university. PhD students in particular are an integral component of research activities, particularly in global and development-related research where the students may be seconded from national governmental or non-governmental organisations and will be applying the research directly on completion of their studies. Postgraduate alumni are also a key part of the global network built up during a tradition of research and are pivotal for determining future research directions and facilitating long-term interactions.

Some departments did not appear to maintain records of the career trajectories of their students other than to emphasise that the foreign students return to their countries and hold important positions. This may be because PhD students tend to retain contact with their supervisors rather than the department, and the timing of the evaluation meant that wider consultation within departments was not possible. Alumni provides a platform for both future research activities and on-going capacity building through continuous professional development, so maintaining contact between alumni and departments is important.

Humanities

There was little information in the self-assessment reports on the career trajectories of the PhD students. The Department of Archaeology, History, Cultural Studies and Religion mentions quota students who have taken on leading positions academically and in public life in home countries, but without detail. There was no information from the departments of Foreign Languages or the Centre for the Study of the Sciences and the Humanities.

Law

There was limited elaboration, but it seems that PhD candidates are absorbed in the faculty even before completing and from interviews it was stressed they are mostly trained to practice as lawyers.

Mathematics and Natural Sciences

In the Department of Physics and Technology almost all candidates have found jobs in cooperating academic institutions, some attaining higher academic positions. There was no information from the Department of Earth Science. From the Department of Chemistry several PhD graduates from developing countries appear to have had successful careers in their home countries of Uganda, Mali, and South Africa.

The Department of Biology provided numerous examples of successful career trajectories of Master's and PhD graduates (specific examples in the Box below).

Examples of career trajectories of graduate students from the Department of Biology:

Khem (PhD from UiB) - now Joint Secretary at Ministry of Forests and Soil Conservation, Singh Durbar, Kathmandu

Dang Thuy Binh (PhD from UiB) currently vice-director for Institute for biotechnology and environment at Nha Trang University, Vietnam

Josephine Esaete who financed her education (Masters and PhD) at BIO through the Quota Programme and now holds a scientific position at Makerere as manager of the Matrix project. She fulfills a potential "ambassador" role for UiB, locally, which is important for long-term collaboration between partner countries and projects.

Medicine and Dentistry

A number of graduates from the Department of Clinical Medicine have successfully become active in both Norway and in the South as researchers, university lecturers, clinicians and programmers. However, from the information provided, it is difficult to assess in detail employment of alumni or the role of the university (UiB) in the career path of the individuals. The Centre for International Health has well-documented cases of graduates with successful career paths in research, programming and teaching, demonstrating a strong contribution to strengthening research, education and outreach capacity at core partner institutions in the global south. Most of the graduates supervised by the Department of Clinical Dentistry have returned to their respective home countries and several cases of successful continuation of research and teaching activities were given.

Psychology

The Department of Health Promotion and Development is extremely strong in recruiting and developing doctoral students. It has been able to recruit PhD students from its Master's programmes in Health Promotion and Gender and Development. Current PhD students are publishing and engaged in teaching. Many international alumni have returned to their country to positions of public health leadership in government or with NGOs, or to university positions and maintain active academic careers. Some of those in university posts are active in collaborations with UiB.

Social Sciences

At the Departments of Social Anthropology and Sociology about half of the PhDs continue into postdoctoral positions in the department, with others at peripheral institutions, researching health, gender, development, migration, ethnic relations, etc. Others continue in related institutions in Norway. Many foreign PhDs return to research positions, or even political positions, in their home countries.

PhD candidates from the Department of Comparative Politics have been offered research positions at the department as one career path. They are also absorbed into the Chr. Michelsen Institute, UN bodies or other bureaucratic positions. From the Department of Administration and Organisation Theory two examples were given of PhD candidates who have returned to their home countries and hold positions in education and research. Most PhD candidates from the Department of Geography are absorbed in research and teaching. The Department of Economics mentions former PhD candidates going into various relevant jobs such as senior advisors in Norwegian foreign aid institutions, senior analysts in Statoil, and researchers and lecturers within academia. The Department of Information Science and Media Studies gives an example of a PhD candidate now working as a lecturer at Makerere University, and who is also the CEO of a company that works with communities, NGOs and government agencies to deliver innovative, affordable and sustainable ICT solutions in business.

UiB Global

UiB Global and its predecessors have been involved in the supervision of a large number of PhD students over the period of evaluation, with the two most significant efforts of the unit being the Bergen Summer Research School and the NUFU projects with education of scholars mainly in the South. The two NUFU projects in Zimbabwe had a significant impact on the number of trained personnel in difficult times in Zimbabwe. Since 2004, 4 PhDs have qualified and are now full-time academic members. One more is a full-time member of the National Museums and Monuments of Zimbabwe. One is completing PhD studies and is currently a temporary full-time member. This represents significant growth in terms of qualified academic personnel. It helped the University of Zimbabwe and the NMMZ to keep up important work and to employ highly-qualified personnel when others left for abroad. The projects engaged both the University and the National Museums early on in dialogue about the future of the candidates and relevance of their theses. The NORAD funded project "Archaeological Research and Cultural heritage management in Mozambique" had from the beginning four Mozambican students attached to the project, two male and two female. They were the first students to take a BA in archaeology at the department of Archaeology and Anthropology History course at Universidade Eduardo Mondlane, Maputo. All four passed their BAs and continued to do MAs. Two are currently undertaking PhDs at the University of the Witwatersrand. All four hold permanent positions at Eduaredo Mondlane University as teaching staff. After the end of the project UiB Global continued to find ways of supporting the students and involving them in other projects. They are all now engaged in teaching BA archaeology and they have, with the unit's support, developed an MA course in archaeology that started in August 2014.

5 Interactions: cross-disciplinarity, local cooperation, international activities, dissemination and societal impact

5.1 Cross-disciplinarity

Cross-disciplinary and interdisciplinary research is required to face modern global challenges. This need does not diminish the requirement for high quality in-depth mono-disciplinary work, but it does place an emphasis on individual researchers and departments to position their programmes within a wider context. Major funding opportunities, such as those presented by Horizon 2020, require an interdisciplinary approach as a pre-requisite to most of their funding calls. The strategic need is for universities to provide mechanisms and incentive structures for interdisciplinary collaboration. This is for two reasons. One is the academic need for generating new knowledge and understanding to tackle the pressing needs of the 21st century. The other is for the more practical need to create pre-competitive areas of research that can successfully apply for major interdisciplinary funding opportunities, such as those in Horizon 2020. The lack of appropriate mechanisms and incentives within the UiB was consistently cited as a major barrier to cross- and interdisciplinary research. Without sufficient incentives, faculties defend their disciplinary boundaries strongly on both financial and academic grounds.

Humanities

As its title suggests, the Department of Archaeology, History, Cultural Studies and Religion incorporates several disciplines and sees itself as a cross-disciplinary department.

The Department of Foreign Languages considers itself as cross-disciplinary, incorporating language, literature, linguistics, culture and history perspectives, and not as a language school. Its potential to combine these disciplines in, for example, area studies is hampered by the structural barriers of funding flows which do not allow student credits to be shared across departments. Thus a Bachelor programme in Latin American studies within the Faculty of Social Sciences, which was very popular, with at least 35 students, was stopped following the strategic decision to strengthen departments. Although this particularly programme was stopped, the Bachelor programme in Spanish language and Latin-American studies continues as an cross-disciplinary programme within the Department of Foreign languages, combining Spanish language and Latin-American literature, history and culture. Cross-disciplinarity also arises from engagement with projects such as CROP through the analysis of linguistic phenomena.

The Centre for the Study of the Sciences and the Humanities conducts research on the application of science in everyday lives, and the current themes of ethical aquaculture, climate, and perception of genetically modified products are topics that are cross-disciplinary by their nature. The Centre sees itself as a platform for active researchers to meet and have regular ground level academic discourse where this is not provided by UiB Global. The interviewees saw a strength in interdisciplinarity that addresses relevant issues but which needs stability in order to grow these links and contacts.

To summarise, research in the faculty is often development-related but the technical restrictions placed by the departmental structure and funding flows precludes interdisciplinary area studies.

Law

The Faculty of Law has been involved in several multidisciplinary projects in the period of evaluation, and sees multidisciplinary cooperation – in law, social anthropology, biology/ecology, medicine, economy, etc. – as fruitful and necessary to analyse global and development-related issues.

Mathematics and Natural Sciences

The Department of Physics and Technology does not appear to have a significant role in cross-disciplinary projects. Similarly, in the Department of Earth Science interdisciplinary research does not appear to play a significant role at the moment, but in the interview it was emphasised that this would be an important achievement if possible. In the Department of Chemistry there is cooperation with medical anthropology and the medical sciences in some projects such as MUTHI, and this is a natural outcome of the nature of the research and its impact. Another project is also cross-disciplinary but primarily with other natural sciences and mathematics.

The Department of Biology, with its many units, hosts a diversity of disciplines and publishes in a diversity of fields. To what extent the different research projects include interdisciplinary elements is more difficult to assess. The department has a strong stand on cross-disciplinary efforts at UiB, which it considers to be declining. However, within the Department cross-disciplinarity continues to be important, as represented in research projects such as the Matrix project conducted by the Terrestrial ecology and aquatic (or fresh water) ecology group in collaboration with the Faculty of Law, and the HimaLines project involving the Faculty of Law as well as the Department of Geography. The department feels strongly that UiB has lost significant momentum and potential in the field of development research by discontinuing the Centre for Environment and Resource Management as a distinct unit. Many of the coordinating tasks and services previously performed by the Centre have not been taken over by the new department structure.

Medicine and Dentistry

The Department of Clinical Medicine has some elements of cross-disciplinarity and translational activities involving hospital units and natural sciences departments. However, overall the research methods applied and the topics seem relatively specific to the profession and staff within the department.

In the Centre for International Health the educational programmes have clearly been designed and based upon cross-disciplinarity with the involvement of a significant number of disciplines from medicine, public health and social sciences. CIH stresses that their history/organisation is relevant for maintaining cross-disciplinarity. As an interfaculty entity, it has been possible to establish multidisciplinary projects and multidisciplinary education for students. The research activities have clear elements of cross-disciplinarity and a translational focus, and a summer school has been dedicated to the global governance aspects. Involvement of, for example natural sciences, economics, and humanities may offer further potential. Linkages between research and areas of student supervision seem well developed and coherent and offer a great opportunity for high quality student driven projects.

The Department of Clinical Dentistry gave limited information on cross-disciplinarity. However, from the topics and titles of the studies supervised, aspects of social sciences do seem to have been included in addition to disciplines specific to dentistry.

For all departments (not just in health) the current internal system of funding for education and supervision seems to be a disincentive for work across departments.

Psychology

The Department of Health Promotion and Development is inherently cross-disciplinary, currently incorporating a Child welfare unit and a Gender and development unit. In addition, it includes a considerable body of work relating to health policy and health systems under Elisabeth Fosse that pertains to global research. Despite the necessity of providing evidence of interdisciplinary research for major fund-holders, the Panel were told of significant barriers to this in the university structures and in a general competition for resources. ECTS credits are attached to students located at specific UiB departments and this militates against staff teaching for other departments and contributing to collaborative activity such as the Bergen Summer School. It also militates against international activity and capacity building such as the supervision of PhD students in other countries, as such work is not rewarded or counted as part of the “normal” teaching portfolio at UiB.

Social Sciences

Cross-disciplinarity has not been an explicit agenda of the Department of Social Anthropology, although the field by its nature tends to be far ranging in terms of other disciplines, such as work on ecosystemic relations in several regions. The Centre for Development Studies, later Unifob Global, was mentioned as an interaction zone for the social sciences and some natural sciences. The cross-disciplinary aspect of the research carried out by the department is not just a matter of division of intellectual labour, but with the aim of achieving syntheses and opening new avenues of research. In our interviews it was made clear that a bottom-up approach was assumed to play a crucial role, but it was also stressed that there needs to be some kind of a centre, a venue where researchers can meet to develop, discuss and debate their perspectives and differences and where new syntheses can be achieved. It was suggested that something like UiB Global would be a good idea, but not in the form that it exists today. In the Department of Sociology the research activity by one staff member Dr. Nilsen is described as profoundly interdisciplinary, involving collaboration and active dialogue with anthropologists, human geographers, political scientists and historians.

In the Department of Comparative Politics there are attempts for cross-disciplinary research through collaboration with the Faculty of Law, the Department of Information Science and Media Sciences and the Faculty of Humanities in a number of courses. However, resource allocation does not accommodate cross-disciplinarity. The best example of cross-disciplinary teaching was said to be the Bergen Research Summer School for both the teaching staff and the PhD students. However even here, concern was expressed about the administrative burdens and red tape. The Department of Administration and Organisation Theory did not outline any cross-disciplinary collaboration.

The Department of Geography describes itself as multidisciplinary, employing staff with PhDs in biology, geology and anthropology in teaching as well as in research. The small-scale fisheries programme in Africa was reported to have a strong multidisciplinary team. The Department of Economics mentions the project MAP: Health Worker Motivation, Availability, and Performance, where researchers from several disciplines, including economists, anthropologists, historians and health service researchers, are involved, resulting in extensive exchange of knowledge and findings that have provided valuable input across the sub-projects. Also mentioned was cooperation with the University of Bangladesh involving public administration (governance) and economics in teaching and supervision of Master’s students. The Department of Information Science and Media Studies mentions work on mobile technology for health as highly interdisciplinary combining information science and development research.

Examples of global and development-related research at UiB, case 3:

Sexual & Reproductive Rights Lawfare – Global battles over sexual and reproductive rights, driving forces and impacts

Across the globe, we see an increasing polarisation and judicialisation of sexual and reproductive rights (SRR). Abortion and homosexuality is high politics, important for political alliance building and voter mobilisation. In Latin America battles over abortion rights are particularly heated. Some countries and provinces have seen a liberalisation, but in more cases, conservative forces have succeeded in introducing total bans or severely restricting abortion rights – or in practice making it impossible to access safe abortions, even where the life of the woman is at risk. In Africa criminalisation of and severe punishments for homosexual relations has become a main political rallying point, with international donors seeking to counter the trend though aid conditionality. Also in Europe these issues have gained renewed political force as illustrated by contestations over homosexual propaganda in Russia, same sex marriage in France and conscientious objection in Norway. Actors on different sides increasingly bring cases before domestic and international courts as part of their strategy to advance their political goals (*lawfare*) and this project investigates the international and domestic dynamics that bring these cases to court and shapes the way the courts decide them, as well as the broader political, social and attitudinal effects of these legal-political struggles. The Sexual & Reproductive Rights Lawfare project is funded by a NRC (Fripro) grant and headed by Professor Siri Gloppen, Department of Comparative Politics, Faculty of Social Sciences, UiB. The international research team comprises members from all regions and a range of disciplines (law, political science, sociology, anthropology, psychology, medicine, economics).

UiB Global

One of UiB Global commitments, according to the unit's strategic plan for 2012-2015, is to "organise cross-disciplinary/cross-faculty research seminar series on globalisation, starting in the academic year 2012/13".⁴⁰ The aim of these seminars would be to "critically explore concepts, understanding and definitions of the content of global and development related challenges, with the aim of strengthening theory, conceptual frameworks and analytical tools." It is notable that UiB Global recognises cross-disciplinarity as a major gap. The current model of organising teaching and resource allocation does not accommodate cross-disciplinarity. The fact that members of UiB Global teach and supervise students in other faculties, and do not receive the credit for it, was mentioned as a key demotivating factor. The university credit system was considered a barrier to cross-disciplinarity. "Administrative burdens and red tape" was also identified as a key barrier. The example cited of a successful cross-disciplinary collaboration is the Bergen Summer Research School, which brings most faculties together.

⁴⁰ *Strategic plan for UiB Global 2012-2015*

5.2 Cooperation with local academic communities

Global and development-related research and education at UiB take place in cooperation with several other higher education and research institutions in Bergen, cf. table 5.1 below.

Table 5.1 Local academic partner institutions

Name of institution	Type of institution
Chr. Michelsen Institute (CMI)	independent research institute
NHH - Norwegian School of Economics	higher education institution
Bergen University College (HiB)	higher education institution
Unifob/Uni Research Ltd. (Unifob Global, the Rokkan Centre and Uni Climate)	research company owned 85% by UiB
Bjerknes Centre for Climate Research (BCCR)	research centre affiliated to UiB
Helse Bergen/Haukeland University Hospital	health trust/university hospital
Institute of Marine Research (IMR)	government-owned research institute
The Norwegian Institute for Water Research (NIVA)	government-owned research institute
National Institute of Nutrition and Seafood Research (NIFES)	government-owned research institute

Source: UiB

CMI is an institute for development research, and a major collaborative partner for UiB. Strengthening collaboration with CMI has been a central goal within UiB's strategic priority of global and development-related research, and collaborative initiatives have been supported by strategic funding (cf. section 1.2). In 2009, CMI moved into the new Law Building at UiB, where the institute has been co-located with UiB Global since the unit was established in 2010.

Together, UiB Global and CMI run the Bergen Resource Centre for International Development (cf. section 1.1). The Resource Centre hosts development researchers from UiB and CMI, and facilitates research and project cooperation between the two institutions. It furthermore functions as a national resource and documentation centre collecting and disseminating information and research results on international development and global challenges, and as a meeting place for researchers, students, industrial actors and others with an interest in the field. In addition to offering access to a large collection of literature, the Centre is very active in organising lectures, seminars and other events disseminating research on development-related issues.⁴¹

CMI is also partner in Bergen Summer Research School (cf. section 4.3), and there is extensive project-based research cooperation between the institute and several departments at UiB, as well as cooperation with regard to students.

Bergen Summer Research School is, as pointed out before, a joint venture between UiB, CMI and three other partners: NHH - Norwegian School of Economic, Bergen University College and Uni Research. These are also central partners in externally funded research projects within global and development-related research. At Uni Research (previously Unifob), Unifob Global was a key actor until the department was closed down in 2010 (cf. section 1.2). Currently, the Rokkan Centre is the main partner, and there is also collaboration with Uni Climate. The Bjerknes Centre is another collaborative partner within climate research. Helse Bergen/Haukeland University Hospital is a central partner within global and development-related studies of issues relating to medicine and health, and the Department of Biology has relevant collaboration with the Institute of Marine Research, the Norwegian Institute for Water Research, and the National Institute of Nutrition and Seafood Research – all government-owned research institutes with offices in Bergen.

⁴¹ An extensive list of events at the Bergen Resource Centre in the period 2009-2014 was presented to the Evaluation Panel by UiB Global (35 pages).

The level of local organisation contact varies significantly between the different departments. The more technical science and medical groups have a lower level of contact than the humanities and social sciences. UiB Global and its predecessors have been an important mediator in establishing local collaborations.

Humanities

The Department of Archaeology, History, Cultural Studies and Religion had a close collaboration with Unifob Global in the period 2007-2010, with staff participating in research projects that were administratively located at Unifob Global and contributing to joint seminars and workshops on historically oriented projects on Islamic Africa. The Centre for the Study of the Sciences and the Humanities collaborates with the Rokkan Centre and Uni Climate at Uni Research.

Law

The Faculty of Law did not comment on cooperation with local academic communities.

Mathematics and Natural Sciences

All the departments have limited contact with local academic communities and cooperation takes place mainly at the national and international level.

Medicine and Dentistry

In the Department of Clinical Medicine the major, and one of the only, local partners is Helse Bergen. The Centre for International Health has close local partners in research and education including Haukeland University Hospital, the Bjerknes Centre for Climate Research, and more recently the Chr. Michelsens Institute. CIH with its large and strong international network of partners could be an even stronger asset to research partners in and around Bergen with an interest in adding international health aspects to their research portfolio. CIH has also cooperation outside Bergen, for example a major project with the University of Stavanger, together with the Lærdal foundation, connected to Haydom Hospital in Tanzania. The Department of Clinical Dentistry did not report local contacts and they were presented as not relevant in the self-assessment report.

Overall, the departments at the Faculty of Medicine and Dentistry do not seem to engage with many civil society organisations.

Psychology

The Department of Health Promotion and Development has worked with the Chr. Michelsen Institute and Bergen University College. In 2013 the specific collaborative projects that linked the department to these collaborators were completed and so cooperation has halted.

Social Sciences

The Department of Social Anthropology has been a central actor in interdisciplinary efforts, not least in international networking and bringing scholars, doctoral and postdoctoral to the University. The Department of Comparative Politics described cooperation with the Rokkan Centre at Uni Research (and the Oslo-based research institute FAFO) on the theme Global Welfare Policies as fruitful for the creation and implementation of projects as well as external funding. Similar experiences were described for the other thematic areas where the Department has collaborated with CMI, with students moving between the two institutions. During the period under evaluation, there have been 10-12 collaborative projects with researchers from the Department and CMI with external funding from the Research Council of Norway, Norad, the Ministry of Foreign Affairs and the Meltzer Research Fund.

The Department of Administration and Organization Theory reported that their local cooperation is limited. The Department of Geography has cooperated with the Rokkan Centre and the Bjerknes Centre for Climate Research on project applications, and also with CMI on research projects and research funding applications. The Department of Economics described cooperation with CMI in the MAP-project. They specifically identified the areas where they have synergy: CMI has a wide network of researchers and policy makers in several countries, while the Department of Economics contributes with methodological and academic expertise. A biannual workshop on development economics which is a joint collaborative initiative between UiB, CMI, and NHH Norwegian School of Economics, was also mentioned, as was the project Responsibility for Foreign Debt: Theory and Empirical Investigations involving researchers from the same three institutions.

Examples of global and development-related research at UiB, case 4:

Collaboration between CMI and Department of Comparative Politics Political institutions in Africa

The Department of Comparative Politics and CMI have collaborated on research related to institutional development in Africa since 2000. In the period 2004-2013 approximately 10 research projects with external funding from NFR, Norad, Ministry of Foreign Affairs, the Meltzer fund, and Norwegian Centre for International Cooperation in Education (SIU) have included researchers from the two institutions. Through various projects and grants, the Department of Comparative Politics and CMI have built a substantial network encompassing scholars in Africa, Europe and the US. Research grants from the Ministry of Foreign Affairs, Norad, Norwegian embassies and SIU enabled long term research on democratic consolidation in Zambia (2000-2003), Uganda (2003-2006), Malawi (2003-2006, 2013-2017). The NUFU/NOMA grants enabled the establishment of a Master's programme in political science, Chancellor College, Malawi. The collaboration has resulted in edited volumes and text books produced at university presses in Africa, as well as a large number of international journal articles. The research programme has resulted in seven PhDs and approximately 20 Master's degrees awarded.

UiB Global

The unit has cooperated closely with the major academic institutions in the area: Bergen University College, the Chr. Michelsen Institute, NHH Norwegian School of Economics and Uni Research. The Bergen Resource Centre for International Development is an important outlet for research communication. It is owned 50/50 by UiB and the Chr. Michelsen Institute and opened in 2009 as an initiative to facilitate closer cooperation between the two partners and to reach out to students and the public. The Communications Advisor at UiB Global is the University's representative on the organising committee, and most of UiB's open events are organised through the Resource Centre.

5.3 International activities

Global and development-related research and education at UiB build on long traditions of academic cooperation with developing countries, and it has been an explicit ambition that activities within the strategic priority area should be linked up to cooperation with institutions in the South and with relevant multinational organisations.⁴²

International activities within global and development-related studies at UiB include international co-publications (cf. section 3.1), as well as participation in international conferences, projects and networks. International projects are funded both by the Research Council of Norway, EU and other general sources for research funding, and by development agencies. In development schemes such as NUFU and the new NORHED programme, cooperation with institutions in the South is mandatory,

⁴² University Board document, 27.11.2003

and UiB has engaged in extensive cooperation with African and Asian higher education and research institutions through its large portfolio of NUFU projects.

The University has institutional bilateral collaborative agreements with a large number of institutions mainly in Africa and Asia, but also in Eastern Europe, cf. Appendix 3. The most comprehensive institutional collaboration within global and development-related research and education is with the University of Makerere in Uganda. The collaboration goes back to 1988, and was formalised in 1991 when the two universities signed a 15-year framework agreement covering research cooperation, competence building, exchange of students and staff, and institutional development. A new 10-year agreement was signed in September 2014.

The UiB-Makerere collaboration involves most faculties at both universities, and a large number of students and researchers have over the years been involved in joint projects. Many of the collaborative projects have received funding from NUFU, and there has been extensive exchange of students, with many Ugandan students staying at UiB. Based on an agreement signed in 2009, the two universities also co-operate on offering joint PhDs, and there are several ongoing projects focusing on capacity building funded by the new NORHED programme.⁴³

In November 2009, UiB and the University of Makerere had a joint evaluation workshop to assess results of the collaboration and plan future developments. According to the report from the workshop, the collaboration has had positive effects, contributing to the development of research and human resources through capacity building programmes. The development of joint Master's and PhD programmes was identified as an important opportunity, and it was stressed that the collaboration should create opportunities for higher education in the North for the University of Makerere and for research in the South for UiB.⁴⁴

UiB is host to two research programmes within global and development-related studies: the Nile Basin Research Programme (NBRP) and the Comparative Research Programme on Poverty (CROP), both run by UiB Global. The Nile Basin Research Programme was started up in 2006 as a multidisciplinary guest researcher programme targeting postdoctoral and senior researchers from the Nile Basin Countries. The programme allows researchers from these countries to come to Bergen for a semester to work together in research groups focusing on specific topics related to the Nile Basin. The objective is both to promote research on these topics, and to build confidence between researchers from the different countries.

The programme was initiated by researchers at UiB, and has received 44.7 MNOK in support from the Ministry of Foreign Affairs in the period up to 2010. Between 2007 and 2009, six research groups with a total of 54 guest researchers have visited UiB. The groups have been integrated into academic communities and projects at the University, in order to facilitate cooperation between the guest researchers and researchers at UiB. There have furthermore been programme activities in the Nile Basin region, e.g. institutional visits and seminars, and a regional programme office has been set up in Uganda.

Since the funding from the Ministry ended in 2010, the programme has received bridge funding from Norad between late 2010 and 2012 (2.315 MNOK), and since 2013, been funded exclusively by UiB.⁴⁵ A mid-term review was carried out in 2009, and an end review in 2013. The end review, which was commissioned by Norad, concluded that the main objectives have at least partly been achieved. The research conducted in the programme was found to be relevant to the needs of the region, and to

⁴³ *Meeting global challenges – Long-term intercontinental university collaboration. Evaluation of the Makerere-UiB Collaboration*, report from evaluation workshop 18-19 November 2009, UiB and the University of Makerere; «UiB og Makerere undertegner ny avtale», news item on the webpages of UiB, URL: <http://www.uib.no/aktuelt/81535/uib-og-makerere-undertegner-ny-avtale>⁴⁴ *Meeting global challenges – Long-term intercontinental university collaboration. Evaluation of the Makerere-UiB Collaboration*, report from evaluation workshop 18-19 November 2009, UiB and the University of Makerere

⁴⁴ *Meeting global challenges – Long-term intercontinental university collaboration. Evaluation of the Makerere-UiB Collaboration*, report from evaluation workshop 18-19 November 2009, UiB and the University of Makerere

⁴⁵ Presentation of the Nile Basin Research Programme on the webpages of UiB, URL: <http://www.uib.no/en/rg/nbrp>; *End Review of the Nile Basin Research Program, Phase 1*, report commissioned by Norad, Pöyry Report R-2013-015

have had positive effects on the careers of the guest researchers. While there was little evidence of direct policy impact, the programme was thought to be well set up for potential impact on regional policy developments. The review report recommended that the Ministry of Foreign Affairs and Norad should consider supporting a second phase of the programme, and UiB is currently awaiting the Ministry's decision on continued funding.⁴⁶

The Comparative Research Programme on Poverty has been hosted and sponsored by UiB since 1993. The aim of the programme is to develop knowledge and build academic capacity with the objective of understanding, eradicating and preventing poverty. CROP is a sub-programme of the International Social Science Council (ISSC), and according to the agreement between ISSC and UiB, the activities under the programme should be integrated into the global and development-related activities at the University. Over the past ten-year period, CROP has organised several conferences, workshops, seminars, etc. and been involved in a joint programme with the Latin American Council of Social Sciences (CLASCO). The joint CROP-CLASCO Programme for Poverty Studies received funding from Norad in the period 2002-2012, and promoted research in poverty studies, e.g. through fellowships, international seminars, workshops and virtual courses.⁴⁷

Researchers within global and development-related studies at UiB are furthermore involved in several international networks, many of which are based at UiB Global. These include:

- the Confucius Institute in Bergen;
- the Scholars at Risk Network;
- the Latin America Network;
- the Research Himalaya Network; and
- the Network for University Cooperation Tibet-Norway.

The latter was established as a collaboration between academic institutions in the Tibet Autonomous Region and Norway in 1994, and cooperation with Tibet has been a central element in global and development-related research and education at UiB for the past twenty years. The network receives funding from Norad, and aims to strengthen the scientific competence and academic independence of Tibet.

Support is provided for both research cooperation and education and competence development for Tibetan academics, and UiB has in the period of evaluation been involved in several collaborative research projects with academic institutions in Tibet, and had Master's and PhD students from Tibet studying at the University. While the network supports education and research within several disciplines, UiB's involvement has mainly been within mathematics and natural sciences.⁴⁸

Looking at the individual units, many departments have extensive international collaboration. However, it is important to draw the distinction between internationalisation, development and global research.⁴⁹ Internationalisation in the form of student exchanges, attendance at international conferences and so on, would be expected of all departments in a university of Bergen's global standing. Development activities through transfer of technology and knowledge for capacity building, health and poverty alleviation is also a moral obligation of leading universities. Global research is international research activity that can only take place on a world stage, and requires active reciprocal participation from collaborating partners. Many departments are conducting this type of research through collaborative agreements and this testifies to the high priority placed on this type of activity by the university central administration.

Humanities

⁴⁶ *End Review of the Nile Basin Research Program, Phase 1*, Pöyry report commissioned by Norad, 2013

⁴⁷ «Development research at UiB 2004-2013 – Contributions by CROP», International Social Science Council/CROP Secretariat

⁴⁸ Data from UiB

⁴⁹ See section 1.3 for definitions of these terms.

The Department of Archaeology, History, Cultural Studies and Religion works with international partners across the globe in various projects, e.g. with the University of Bordeaux in the Tracsymbols project and the Zanzibar Indian Ocean Research Institute in the project Linking Global Cities. The Departments of History and/or Archaeology in Jordan, Khartoum, and Cairo are also partners. The department has maintained a long and vibrant relationship with Sudan resulting in various research projects, and a flow of doctoral students and postdoctoral fellows to UiB. The Department of Foreign Languages organised a public workshop at the XXXVIIIth Brazilian Congress of Communication Sciences in the autumn of 2014, and the Centre for the Study of the Sciences and the Humanities works with universities in Bangladesh and Hawaii on the TRACKS project. As part of the large EU SEAT project, the Centre works with European partners and Asian partner institutions. The PEGASUS project is also an EU project with multiple partners.

Law

The Faculty of Law have many informal international networks with which they collaborate.

Mathematics and Natural Sciences

In the Department of Physics and Technology international activities include training of researchers and joint academic publications. The Department of Earth Science has a major programme of capacity building with collaborating countries. In the Department of Chemistry most of the work of the natural product group is international and the Department's research is presented and published internationally; the leader of the group has been awarded an international prize for his contributions. International activities also include training of PhD students who have returned home to establish themselves as researchers in their home countries.

The Department of Biology has extensive international collaboration ranging from networks established around student initiated projects and large research projects including senior researchers from the Department and partners in the South. The department is also involved in large international consortia. International partnerships are centred on research partnerships and student (including PhD) supervision activities, with less general capacity building and educational partnerships.

Medicine and Dentistry

In the Department of Clinical Medicine the activities include PhD student supervision and follow-up activities with alumni who have returned to institutions in their home countries, for example Kenya. International collaborative activities are centred around short training and skills transfer. The Centre for International Health has an impressive list of partners (in Asia and Africa), including key partners with very long term partnerships in particular in Sudan, Ethiopia, Tanzania and Uganda. Significant research collaboration is centred on PhD supervision, senior research collaboration, short term training activities, educational partnerships and skills transfer. There are fewer activities directed at wider institutional capacity building. Partnerships cover universities, ministerial research and training units and private research organisations. The Department of Clinical Dentistry has international collaboration centred on the network of students being supervised and local partner institutions linked with the student projects.

Psychology

The Department of Health Promotion and Development's publication output is mostly with international partners and in international journals. Many doctoral students have taken up academic positions in overseas universities. There is a high number of international projects funded by the University, NUFU and the Research Council of Norway. The projects are in sub-Saharan African countries, Latin America, Asia and Eastern Europe. A considerable part of the department's research involves working with local communities in the South in designing and implementing studies e.g. with Tanzanian communities around childcare. There are two EU funded projects, including a school based HIV/AIDS prevention project in sub-Saharan Africa that includes universities in Sweden, the Netherlands,

Tanzania, Uganda and South Africa. In addition the department is a World Health Organisation Collaborating Centre for the Health Behaviour of School Children study that includes 40 countries in Europe and North America.

Social Sciences

Given the nature of the research in the Department of Social Anthropology, it is understandable that most of the international activities of the department have been linked to other academic communities. The department has extensive research activities, and insofar as it trains many people from Third World countries it develops expertise abroad as well. The department participates in many international conferences. In the Department of Sociology, the postdoctoral project Everyday state-society relations and social movements in Adivasi Communities, Western Madhya Pradesh, India 2009-2013, enabled the postdoc fellow to build extensive links with relevant academic institutions in India and USA.

The Department of Comparative Politics has built strong institutional links with leading Political Science Departments in Europe through research grants which include an internationalisation grant. These funds have also been used for participating in international conferences and expanding networks, and for funding affiliated professors and guest lecturers. The Department organised a workshop for staff in collaboration with the University of Warwick in 2013, which brought together participants from different disciplines and faculties across the University. This is intended to be an annual event. Collaboration with the German Institute of Global Affairs has enhanced international collaboration and dissemination, while collaboration with CMI has provided resources for communication and dissemination through many international events organised by the Bergen Resource Centre for International Development. The NOMA/NUFU projects in Malawi have been significant in building scientific expertise through the establishment of a Master's programme in political science. The Department stressed how the new budgetary process has enabled the department to build a foundation for quality research on China, to secure funding from the Research Council of Norway, to expand research and teaching to Latin America and the Middle East, as well as to recruit scholars internationally. UiB Global has functioned as a source of information about development research, seen as valuable in widening institutional collaboration.

The Department of Administration and Organization Theory has signed a memorandum of understanding with the Ministry of Women's and Children's Affairs in Bangladesh to guide formulation of gender related policies. There is also collaboration with Tribhuvan University in Nepal on enhancing capacity building through higher education and research. There is further international collaboration with Peradeniya University in Sri Lanka.

The Department of Geography has extensive international collaboration within both education and research. The Department of Economics participates routinely at international academic conferences

Examples of global and development-related research at UiB, case 5:

The European Consortium for Pacific Studies (ECOPAS)

The European Consortium for Pacific Studies (ECOPAS) is coordinated by Professor Edvard Hviding, who is the Director of the Bergen Pacific Studies (BPS) Research Group at the Faculty's Department of Social Anthropology. BPS is the leading research group in Europe within the anthropological and multidisciplinary field of Pacific studies, having developed this position since 2006 through several major externally funded projects, and the institutional leadership of both the European and the North American associations for Pacific research. The BPS group took the lead in responding to a call from the European Union's 7th Framework Programme in 2011, for developing a research consortium to advise the European Commission on its Pacific engagements. ECOPAS is funded through FP7 for 2012-2016 and includes the four European Pacific research centres (Bergen, Marseille, St. Andrews and Nijmegen), the 12-nation University of the South Pacific and the National Research Institute of Papua New Guinea. In addition to its advisory role, ECOPAS carries out pioneering multidisciplinary research on climate change, sustainable development and gender relations in the Pacific Islands.

and workshops presenting development-related research. For the Department of Information Science and Media Studies publications in international academic journals and participation at international conferences are the main international activities.

UiB Global

As would be expected from its remit, UiB Global has maintained an exceptional level of international activity with a high degree of engagement in policy and development. This is recognised in a significant level of major awards and honours. The unit has an extensive and close collaboration with research networks all over the world such as SANORD, NorLARNet, Scholars at Risk (UiB is currently hosting the first scholar at risk), Himalaya Research Network, and extensive networks in Eastern and Sub-Saharan Africa. UiB Global has also been instrumental in securing The Mahmoud Salih Collection (Sudan); a unique collection of documents and art donated to the University and now hosted by UiB Global. Two more private collections are currently being added to this unique resource.

The NUFU-projects in Zimbabwe contributed significantly to the postcolonial situation in Zimbabwe, when European employees at the University of Zimbabwe were about to leave as the political situation deteriorated. The Norad funded project on archaeology and cultural heritage management in Mozambique contributed significantly to developing Bachelor and Master's teaching in archaeology at the Eduardo Mondlane University. The longstanding collaboration with Makerere University – started in 1999 – has created a platform for joint research in various disciplines (particularly in health sciences and natural sciences) and across disciplines, both in Uganda and neighbouring countries. Three honorary doctorates have been awarded during the course of the Makerere collaboration.

5.4 Dissemination

Dissemination is a fundamental part of research, and it is often said that there is no point in doing the research unless it is effectively communicated. A common criticism of standard methods of dissemination through academic journals is that they reach a limited audience, and a range of channels are needed in order to achieve effective uptake and impact of research. A number of dissemination channels were mentioned during the interviews as important avenues for networking and expanding collaboration. There is a tension here however, as academic peer reviewed publications are used as the standard indicator metric to assess research outputs in national

assessments, even though they are widely regarded as one of the least effective methods of communicating results to a wider audience. In consequence university researchers focus primarily on publication of peer reviewed academic papers.

Humanities

The Department of Archaeology, History, Cultural Studies and Religion disseminates research results through the traditional channels of academic publications and conference presentations, but also contributes to public lectures and media popularisation, for example the Lost Kingdoms of Africa (BBC) programme. Its areas of interest are in current demand and it is a high profile department: annually it gives 10-20 public talks and 50 media articles, and has made an estimated 400 individual interviews and comments since 2011. The Tracsymbols project, as well as the Department's work on the Sudan have been of particular international interest.

The Department of Foreign Languages organised a public workshop for the POLAME project at the Brazilian Congress of Communication Sciences in the autumn of 2014. The Centre for the Study of the Sciences and the Humanities does not give examples of dissemination, but it is relatively easy to identify reports on the Ethical Aquaculture Food Index (EAFI).

Law

The Faculty of Law has a good deal of dissemination activity through national and regional newspapers as well as other media, such as national TV and radio channels.

Mathematics and Natural Sciences

Dissemination of research from the Departments of Physics and Technology, Earth Science and Chemistry is primarily through the publication of academic articles. The Department of Biology has also focused upon publications in peer reviewed international journals, including high-ranking journals, supplemented by submissions and presentations at scientific conferences. A number of both scientific and popular articles have been presented in the countries where projects have been undertaken and some also in the Norwegian media. The Department of Biology furthermore disseminates to stakeholders such as the World Health Organisation and other health authorities.

Medicine and Dentistry

The Department of Clinical Medicine has public awareness and engagement activities and media reporting as a feature across many of its ongoing activities, and uses a variety of channels of communication. However, the listed dissemination activities seem more related to PhD education and training than public awareness and communication activities.

The Centre for International Health has a consistent focus on communication and outreach, including engagement with policy makers, programmers, the public at large in the South and international organisations. Traditional communication through scientific conferences and research publications are complemented by blogs, media reporting and popular articles. Overall, the dissemination and outreach activities are extensive in scope covering both national and international channels of communication. It is not clear if communication and outreach includes on-line education and involvement of, for example, primary and secondary education at schools in Norway, public events or on-location public debates, but overall engagement with local stakeholders does not seem to be a great priority.

The Department of Clinical Dentistry presents research results at conferences and through thesis reports. General public engagement through media seems limited.

Psychology

The Department of Health Promotion and Development disseminates research results through conference presentations across a wide range of topics, for example in the past year at the International Association of Child and Adolescent Psychiatry Congress in Durban and the International Congress of Applied Psychology in Paris. All permanent staff in the group have presented their work at international conferences during the time period under scrutiny.

Social Sciences

The Department of Social Anthropology includes dissemination as part of its research practice. It is in the nature of ethnography that its practitioners develop close relations to the populations in which they work and where their knowledge is often disseminated as well as discussed critically. Department members have also often been engaged in the news media and debates in the Norwegian press. Several projects have public web pages. In the Department of Sociology the major mode of dissemination is through national and international peer reviewed journals, monographs published by leading international publishing houses and through participation in national and international conferences. There has been a steady increase in peer reviewed publications and in conference participation during this period. Listed were 18 instances of participation in conferences, seminars, workshops and guest lectures within Norway while internationally there was participation in 13 conferences and workshops.

At the Department of Comparative Politics, publications in international journals and participation in international conferences and workshops are the main forms of dissemination. In addition national and international conferences and Master's and PhD thesis are important channels. Public talks and different types of media and policy briefs have been used for dissemination. Publications and edited books which talk to the audiences in the south may not be recognised in the Norwegian publication system, but various publications have had major media coverage for example, in Uganda, Malawi, Shanghai and Norway.

The Department of Administration and Organisation Theory disseminates its research through the publication of books and journal articles. In South-Asia policy briefs have been used. The Department of Geography disseminates research results through publications in peer reviewed journals, participation in national and international conferences and meetings, popular articles, TV documentaries, web pages, videos on YouTube, and other media in Norway and in collaborating countries in the South.

The Department of Economics engages primarily in international dissemination with the academic community as its main target group. The staff and PhD students participate in national and international conferences, workshops, and seminars. In the MAP project, dissemination workshops were organised in Tanzania. The Department of Information Science and Media Studies disseminates through academic journals and conferences as well as technology companies in Uganda.

UiB Global

UiB Global maintains a wide variety of different dissemination channels, both within Norway and internationally. English is the language used in most channels. Major target groups are other researchers, students and the informed public. Most dissemination is academic in nature, though series of films have disseminated UiB research to a wide popular audience. The Bergen Resource Centre for International Development is an important outlet for dissemination. The annual number of events organised by the Centre has stabilised at around one hundred, ranging from conferences, lectures, panel debates and intimate literary salons. Relevant events are streamed and made available on the website for later viewing. A small in-house printing press (BRIC press, est. 1987, closed in 2012) published 57 books since 2004 (monographs, edited volumes, text books, bibliographies, reports and other research findings) and was registered with the National Library. Distribution has been through an online bookstore and personal networks. The project *In the Wake of Colonialism* had a major exhibition at the Bergen Museum in 2009 and a series of seminars and popular dissemination all over Norway. The NUFU Zimbabwe projects also held exhibitions and had a close collaboration with Mutare museum in Zimbabwe where they engaged with the public and local schools. In 2006 a town museum and library were built by the Norad project in Mozambique with a permanent exhibition and a school library. The museum was taken on by city authorities and has proved sustainable. It is now a vibrant library and used for various local art exhibitions as well as offices for city cultural authorities.

5.5 Societal impact

Societal impact is hard to define, yet funding agencies are increasingly requesting researchers to identify the impact and uptake of their research. The definition of “impact” used in the UK Research Excellence Framework 2014⁵⁰ is “an effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia.” There can be a significant lag between the production of academic research outputs and societal impact. Although some research may lead to immediate impact, such as a medical breakthrough or technical innovation, it usually takes about five years to establish an academic research programme, and societal impact may be ten to fifteen years afterwards. However, notwithstanding a long-standing body of intervention work by many of the departments at UiB, there is no clear attempt to articulate social impact by all departments and in some cases little evidence was provided.

Examples of dissemination of research through film

Research projects have produced several television documentaries over the years: Terje Tvedt, a professor at the Department of Geography, has published two books based on his award-winning TV-documentaries on water, *A Journey in the History of Water* and *A Journey in the Future of Water*. The latter book has been translated into a number of languages. He has also written a book and TV-documentary on the River Nile, *The Nile Quest*. *A Journey in the Future of Water* is a series of three programmes of 52 minutes each. It has been shown eight times on Norwegian television and sold to more than 25 countries. The series won the Gullruten award as the best TV-documentary in Norway in 2008. *The Nile Quest* is a series of three programmes of 52 minutes each. *A Journey in the History of Water* is produced as a DVD in eight languages and is the biggest international success in Norwegian TV-history. UiB Global has sold these documentaries to hundreds of universities and institutions all over the world and the DVDs are used in teaching courses at a great number of universities in the US, Canada, Australia, Asia and Europe, including Norway. Other films arising from research projects include *The White Do-Gooders* (TV-series in English and Norwegian, 2007); *Women, War and Welfare in Jerusalem* (Documentary in English, 2009). The NUFU Zimbabwe projects and NORAD Mozambique archaeology project jointly produced three ethnographic films: 1) *Makashwa, Rainmaking and Archaeology in Zimunya, Zimbabwe* (2006), shown on national TV in Zimbabwe and used at University of Zimbabwe. 2) *Making Rain* (2007), a film about politics and reality of the annual traditional rainmaking ceremonies in Zimbabwe and Mozambique. The film has won several international awards in film festivals (Tartu, Paris and Sibiu). It was shown on TV in Mozambique and a special radio programme was made during the filming period. The team was followed by a radio journalist. It became one of the most popular radio programmes in Mozambique in 2005. 3) *If the Vagina had teeth* (2009), an ethnographic documentary on the annual rainmaking ceremonies in Chassuka, Mozambique.

Humanities

The Department of Archaeology, History, Cultural Studies and Religion highlights four key areas of impact, demonstrating internal and external visibility and the department acting as a source of expertise:

- the Tracsymbols project on early cultural developments in South Africa, which is a major archaeological project exploring symbols in the culture of the Middle Stone Age;
- Work on Darfur which has contributed to UN attempts at conflict resolution and had important impact in the area of preservation of cultural remains;
- Work on Islamic law and history;
- Research on Norway-China economic and cultural relations.

⁵⁰ <http://www.ref.ac.uk>

The Centre for the Study of the Sciences and the Humanities refers to the Ethical Aquaculture Food Index (EAFI) as a channel for societal impact, as this is used in many reports on global food security. Other work from the centre is a project that has just started on climate change in Bangladesh. The project combines interesting methodological approaches with important work for the area, as Bangladesh is one of the most vulnerable countries in the world to the threats of climate change.

Examples of global and development-related research at UiB, case 6:

Global and development-related research at the Faculty of Humanities

A special place in global research at the University of Bergen belongs to research on the Republic of Sudan. This covers a large variety of endeavours, from dentistry to archaeology. The emphasis on Sudan grew organically from the interest that researchers in various fields had taken in this region, but was also fuelled by a focused effort by the UiB leadership. In the humanities, archaeology has been important, with an early focus on archaeobotany and the inception of agriculture in this region, but also drawing on anthropology in studying the production and the social functions of food and drink. The growth of ancient civilisations in the Sudan created a fruitful collaboration between archaeology and Classics. In the Darfur region, Bergen has been helping conflict resolution efforts at the UN and elsewhere. Our approach to Sudanese studies in various fields of the humanities has become known internationally as the "Bergen school", which refers both to Bergen's emphasis on the retrieval and preservation of pre-modern written sources (against the view that "Africa has no written history"), and to the fact that academic input and methodological influence has travelled not only from the "north" to the south, but just as much from the Sudan to us.

Law

The Faculty of Law has not reported on societal impact, but the study of law is largely vocational and so impact is through training and graduation of practising lawyers.

Mathematics and Natural Sciences

For the Department of Physics and Technology societal impact is limited to the specific project orientations, but clearly this is highly important for the countries in which the projects are carried out, as is the education of local researchers. The Department of Earth Science produces knowledge of seismic phenomena which is crucial for the countries concerned. The building of research capacities in those countries has also been very important. For the Department of Chemistry the impact on society is via training of researchers and via the scientific results achieved, which could have very positive effects on developing countries' economies.

In the Department of Biology the areas of research have high societal relevance given the global pressure on natural resources, the need for biodiversity conservation and the demand for food. The topics of work are well aligned with the areas of competence and expertise available within UiB and Norway at large. A link has been established in several areas of work between more basic science, applied sciences and policy and management. Where relevant, such linkages are likely to increase societal impact even within a relatively short period of time. An emphasis including research, education, informing policy and public engagement forms a good starting point for impact beyond the university environment.

Medicine and Dentistry

Societal impact in the Department of Clinical Medicine is based on rather specific research topics and research based impact assessments. However, the educational and outreach activities of the

Department can have relevant and interesting implications and influence in Norway as well as countries of focus in the South.

At the Centre for International Health the scale and diversity of important health topics addressed and the Centre's deliberate emphasis on engagement with organisations responsible for programming at national and international level, is more than likely to have resulted in important impacts on public health. The capacity building activities at individual level, long-term research partnerships, communication strategy and skills transfer will benefit institutions in the south. CIH involvement with education and communication is likely to benefit students at UIB and regional partners. CIH has presented strong documentation of impact.

In the Department of Clinical Dentistry the societal impact is focused on very specific aspects of dentistry and oral health. The research findings are likely to be of primarily local relevance.

Psychology

The Department of Health Promotion and Development considers its most important impact to be initiating community-based projects over nearly twenty years and directly working to improve the quality of life of adults and children affected by HIV/AIDS in Africa. The department has also led a major school-based initiative on sexual and reproductive health in southern and eastern Africa, which has contributed to the development of more effective prevention programmes.

Social Sciences

The societal impact of the activities of the Department of Social Anthropology is difficult to assess but the department has had a substantial impact through its contribution to knowledge of the developing world, and particularly through education in anthropology, which is channelled into the publicly funded school system. In the Faculty of Social Sciences in general, as indicated in the sections above, all departments have made important contributions through publications for the academic community. Moreover, there is substantial capacity building in terms of developing Master's and PhD programmes in many collaborating educational institutions in the South. There is also dissemination through popular publications, policy briefs, and various media channels, which may provide information to the public, but to what extent this contributes to policy improvement or has societal impact on communities is not clear or articulated.

UiB Global

UiB Global and its predecessors have had a high level of societal impact at a wide range of levels from creating major shifts in perspectives to capacity building, for example through the creation and promotion of films as described above. In terms of capacity building, the Nile Basin Research Programme hosted 56 senior researchers from Nile Basin institutions of research and higher education as guest researchers at UiB. They participated in seven research clusters within various academic fields. Senior academics are often advisers to their respective governments, and so the knowledge exchange can be fed directly into policy. The project was also remarkable in that nationalities from countries that are at conflict were brought together. In 2013, UiB was awarded two NORHED projects (Water and Society - Africa and Water and Society - Asia), which both were designed and initiated based on the cooperation in the Nile Basin Research Programme.

6 The significance of the strategic priority of global and development-related research at UiB

6.1 The added value of additional resources

As a strategic priority area at the University of Bergen, global and development-related research has received additional resources in order to facilitate and enhance activity. This section attempts to assess the strategic added value and utility gained from these additional resources. The evaluation is by necessity limited, as UiB has not been able to provide figures for strategic funding or detailed information on how funds have been allocated. Moreover, it is not possible to make a precise evaluation because it is hard to assess the counterfactual, in other words, what would have occurred in the absence of the additional resources. Benefits may also be gained tangentially to areas of focal activity as the existence of the priority area may attract funds or stimulate research even though groups concerned are not receiving direct support. For example, staff appointments and replacements being retained in a subject area because it aligns with the strategic priority. Moreover, a conducive environment for cross-disciplinary interactions in the priority area also needs to be in place in order for the additional resources to provide leverage. For example, many of the groups interviewed reported that joint working between departments was hampered by lack of arrangements to apportion time spent on supervisory effort or teaching, and this makes it difficult to isolate whether or not resources are the limiting factor for enhancing activity. It should also be noted, that large groups with a tradition of working in global and development-related research, such as at the Department of Social Anthropology, may not require additional resources to continue their interests as they will have strategically appointed staff aligned with their research tradition. However, some units such as the Department of Sociology and the Faculty of Law, with few staff in the priority area, do benefit from a centrally organised resource.

Only two units provide figures for funding received through UiB's strategic priority of global and development-related research in their self-assessments: HEMIL (300,000 NOK in 2008) and the Department of Clinical Medicine (100,000 NOK in 2012 and in 2013 as funding from SPIRE⁵¹). Seven units report on having received strategic funding (in part from their faculties), mainly for PhDs and post-docs but also for education, networking and projects: UiB Global, CIH, HEMIL, and the departments of Clinical Medicine, Social Anthropology, Comparative Politics, and Archaeology,

⁵¹ SPIRE is UiB's Strategic Programme for International Research and Education, linked to the University's strategy and action plan for international activities 2011-2015. The programme provides seed money for building collaborative research and/or learning and teaching initiatives with the University's strategic international partners.

History, Cultural Studies and Religion. Eight units report that they have not received additional resources or have not reported at all.

Some units report that the strategic priority of global and development-related research has had little or no significance for their activities in the field (the departments of Biology and Social Anthropology, and the Centre for the Study of the Sciences and the Humanities). The Department of Biology says that the strategic priority has been insignificant for the Department in the period of evaluation, and argues that a more determined approach from the central leadership concerning organisation and funding is needed. The Department of Social Anthropology states that the funding has not been long-term, but is negotiated on an annual basis.

In contrast, other units state that the strategic priority has been important, in terms of “labelling” development-related research as a priority which has helped attract both internal and external funding; facilitating the development of new educational programmes (the Master’s Programme in Development Geography and the Bergen Summer Research School); increasing the number of quota students; and generating projects through agreements with the South. UiB Global is said to have been important for the spread of information about relevant activities across faculties, and together with the Bergen Resource Centre for International Development, to have provided access to valuable resources in the form of office space, seminar rooms, library and meeting places. The Department of Comparative Politics considered that allocation of strategic funding became more transparent with the reintegration of the activities of Unifob Global and the establishment of UiB Global.

This ambivalence is perhaps related to the difficulties noted at the beginning of the section. In general, however, the additional funding is reported to have been important for strengthening research and education (increasing staff, establishing networks, and developing proposals for external funding).

6.2 The function and value of the strategic committee for global and development-related research

The strategic committee for the priority area global and development-related research has been reorganised several times since the late 1980s (cf. section 1.2), and experiences with the committee varies between units and over time. According to some units, the strategic committee has played an important role in internationalisation activities, including the establishment of the Master’s Programme in Gender and Development and the Bergen Summer Research School, and facilitated information sharing and networks across faculties. However, several units - within the humanities, natural sciences and medicine - report that they have had limited or no contact with the strategic committee in the period of evaluation, and UiB Global argues that the strategic committee, and the strategic priority of global and development-related research more generally, is currently felt to be insignificant. The self-assessment report provided by UiB Global states that “the question of whether the Strategic Committee for Global and Development-related Research has lost its role and whether the University of Bergen really prioritises this thematic area, has been raised and is of serious concern for colleagues in this broad thematic focus area.”

A strategic committee representing all the faculties that can facilitate cross-departmental research activities is clearly required, as there are administrative barriers that need to be removed. If central resources are to be allocated to a research priority such as global and development-related research, then this also needs to have oversight with representation from across the University.

6.3 Main observations

There is no doubt from the evaluation that the University of Bergen is recognised as a world-leading centre for global and development-related research and education. This is evidenced by:

- Long history of engagement with the field;

- Large number of high quality academic outputs in many different disciplines;
- Diverse and effective ways of disseminating research findings to a wide audience;
- Capacity building that has resulted in many UiB graduates, both Norwegian and international;
- High societal impact and influence on policy, both within Norway and internationally;
- Strong engagement with international and local implementing organisations thereby ensuring effective uptake of research outputs.

A large number of graduates have been produced from the many Master's programmes within the strategic priority area and ample evidence was given to the Panel in the self-assessments of impressive career trajectories of the PhD graduates.

Additional resources invested in the strategic priority area of global and development-related research and education have clearly paid dividends in establishing and maintaining UiB's strong profile in the field, though it is hard to quantify this return. UiB has an excellent record of attracting external funding in the priority area, and UiB Global has played an important role in supporting the implementation of research projects in often difficult and challenging conditions in developing countries. However, it should be noted that most of these research projects have combined research and research capacity building. This provides a strong link with development actors and has good societal impact, but also tends to define the research topic and is dependent on donor funds.

Within the strategic priority area, there is much productive cooperation in generating resources and networking with the Chr. Michelsen Institute, particularly through UiB Global (and its predecessors) and the Bergen Resource Centre for International Development. Many other local partners collaborate in research and education with the different units (see Section 5.2), such as the Rokkan Centre and the Bjerknes Centre for Climate Research, particularly on interdisciplinary projects.

Many of the research groups evaluated have exceptional levels of international activities. Long-standing projects, for example in the areas around the Nile, in Sudan, Uganda and other countries in the Nile Basin, have developed a high level of expertise abroad leading to continuing project cooperation and extremely successful profiling, such as the popular television series on the Nile. Similarly, there has been strong cooperation in Nepal and a number of other countries, particularly, Malawi, Tanzania and Ethiopia.

Promotion and dissemination of the research has been through many and varied channels. All the research groups evaluated are producing academic outputs in international peer reviewed journals or in other forms that are appropriate for the research topic and discipline such as books and monographs. The television series on the Nile has already been mentioned as an exemplar of bringing research to a popular audience. Dissemination also takes place through the Bergen Summer Research School for PhD researchers.

Cross-disciplinarity is an integral part of many of the research projects, particularly the larger, longer-term projects. The Nile Basin, Sudan and Nepal projects have already been mentioned, but there are many others, such as those of the Bergen Pacific Studies Research Group, the Sexual and Reproductive Rights Lawfare project, and projects at the Centre for International Health, to mention just a few. Cross-disciplinarity has clearly strengthened these projects, and the presence of coordinating units (such as UiB Global) and centres (such as CIH) to enable this cross-disciplinarity to occur is important. Some important and effective projects, such as those on UV optics in Uganda and Tibet, are more focused on the transfer of knowledge within a single discipline, so cross- and interdisciplinarity is not necessarily a pre-requisite to effective development research.

The value and function of the strategic committee within the priority area during the period under evaluation had different interpretations among the research units. Some units considered that the committee played a significant role, whereas others had limited interaction and questioned its usefulness. Influence of the strategic committee on strategic decisions has also varied with time.

The need for support functions in the strategic priority area varies amongst the groups. Well-established and relatively large groups within departments and centres are not so much in need of support compared with researchers outside the larger groups. However, some of the centres that in the past have been merged into departments, expressed concern that they no longer keep overheads and so lack resources for proposal development, strategic investments in a particular field, etc. For activities such as those undertaken in collaboration with the Bergen Summer Research School and the Bergen Resource Centre for International Development, or for researchers working within the strategic priority area in departments where there is not a critical mass of researchers in the same field, then a support system is needed and currently this is supplied by UiB Global, as well as the Division of Research Management and Division of Student Affairs. Opinions expressed by some of the groups covered by the evaluation are discussed below.

The Faculty of Humanities spoke of the importance of having a flexible structure that allows research groupings to arise and close according to availability of both external funding and staff, but also of having a sustainable and clear platform that enables interdisciplinarity. This latter type of platform was thought of as a centre (or several centres) that is not linked to, or constrained by, teaching (and its consequent funding flows) and which can maintain an academic contribution to inquiry and projects. Lack of this type of flexible structure, it was claimed, might result in universities losing out to consultancy firms that are more flexible.

The Department of Clinical Medicine has established productive long-standing partnerships in several countries in the South building individual research capacity and generating research outputs and funding. There are very specific areas of research involving partners in the South but there are some challenges in generating large scale funding. In this type of work, from a strategic perspective, it is highly relevant to embed global and international related development aspects into highly specialised departments. In other words, excellence in topic specialisation is also important for the strategic priority area as well as cross-disciplinarity.

In the view of the Centre for International Health, the Centre has had a profound impact on establishing international health as a core and highly productive area of research at UiB, and CIH can be viewed as one of the leading centres in Scandinavia in the field of basic and fundamental global health. CIH has received strong recommendations and positive evaluations in recent reviews as seen especially in the areas of nutrition, HIV and child health. It has attracted significant external funding primarily in Norway and mainly from government sources. CIH has strongly profiled UiB internationally. Over the years, the Centre has been supported by and had the attention of the UiB management, but recent restructuring has led to loss of an independent budget at CIH and this has reduced the incentive for other departments to place their projects administratively at the Centre. CIH fears that reorganisations, changing management responsibilities, re-definition of priorities (possibly towards a more general "global" outlook) and re-allocation of budgets within UiB may weaken the Centre further. The Panel considers that overreliance on quota scholarships and Norwegian government funding may call for a broader funding base. It is likely that turning CIH into a separate department, as it was between 2005-2010, within the Faculty of Medicine and Dentistry, securing overheads allocated for CIH activities and possibly providing UiB support for staff to broaden out the agenda into global health, may be elements of regaining strengths. Without a strong capacity within UiB to apply for, initiate and manage large capacity building, educational and research partnerships with institutions in the South in the field of medicine and public health, it will be difficult to facilitate the involvement of specialised UiB departments and to maintain the University's profile and funding base in the field of international health.

According to the Department of Biology, global and development-related research at the Department has been more of a bottom-up activity in the period of evaluation than a result of a strategic prioritisation by the University. A discussion of priority setting seems to be needed to resolve potential conflicts between investigator-driven priority setting and centrally set priorities. The linkages between research and areas of student supervision seem well developed and coherent in the Department. In

the self-assessment report, a concern was expressed about representation of the Department of Biology in the activities of the Strategic Committee for Global and Development-related Research: “Currently however, UiB’s strategic committee for global and development-related research is not a very active and its mandates do not seem to be of relevance to BIO”. The department calls for a review or re-organisation of the area of research and education.

The difficulties of incentivising cross-disciplinary, inter-faculty, research projects within a traditional university structure, where departments are cost centres rooted in teaching, is not unique to UiB. The text below outlines experiences of the Panel Members of interdisciplinary research and the sustainability of research centres that will help to guide the recommendations. Jane Wills, Jon Lovett and Flemming Konradsen discuss the London South Bank, Leeds and Copenhagen Universities respectively. Jonathan Friedman gives some examples of the trajectory of research centres; and Beth Maina Ahlberg gives some examples from South Africa.

London South Bank University faces many of the same challenges as UiB. The challenges have been to integrate research, enterprise and teaching and to achieve interdisciplinarity across the University. Despite the identification of cross-cutting themes of which health and wellbeing is one, there is not much collaboration because of a lack of opportunities for collegiality and because of funding flows. The structures across the University have also not been consistent with different uses of the terms institute, grouping and centre. Currently, the University is moving to a structure of four schools across the University within which there will be several departments. The schools host one or more institutes to whom the institute will be financially accountable. Each institute houses a research centre. Each centre acts as a hub for research development, activities and groups, and is closely linked to one or more academic departments, e.g. a centre for media and culture research, a centre for educational research, a centre for research in psychology and a centre for social policy research are all housed in the Institute for Social Sciences Research. The centres drive research activities and the institute offers research supervision. Teaching takes place in the school.

The University of Leeds in the UK is structured into faculties and departments, with research clusters on focal areas within the departments. Whilst this provides administrative efficiency in a large university and brings together researchers with common interests, these structures lead to the creation of research “silos” from both the top down and bottom up. The research assessment exercise performed every five years or so in the UK also encourages this “silo-isation” process through discipline-based evaluation submissions and the need for departments to present strengths of their research groups. In order to counteract this process the University established a number of interdisciplinary hubs, for example on Africa and on Energy and Water, which extend across all faculties and provides a structure for people with common subject interests. The hubs have a coordinating office and were given generous start up funds for employing research fellows, who were linked to specific departments. This approach has been important for preparing bids for large interdisciplinary grants, such as those under Horizon 2020. One of the more successful hubs has been on water, and it describes itself as “one of the largest interdisciplinary centres for water research in any university in the world, encompassing expertise from across the physical, biological, chemical, social and economic sciences and engineering as well as the arts.”⁵² The University also recently appointed a number of “leadership chairs” with the specific remit of engaging in research across faculties and leading research teams in bids for large funds. The interdisciplinary drive from the University central administration is continuing, and a set of university-wide “themes” are being introduced that include topics covered by the existing hubs, but also introduce new areas, such as Sustainable Cities. There is also a simple system for supervising PhD students across departments and faculties with each student having several supervisors, each being allocated a percentage of the supervisory load irrespective of the parent department of the supervisor.

⁵² URL: www.wateratleeds.org

Within the past four years, the University of Copenhagen has established cross-faculty Schools to act as information and collaborative hubs e.g. the School of Global Health⁵³. Such hubs facilitate interdisciplinary activities primarily related to summer schools, development of MSc and PhD courses, new Master's programmes, international field courses, seminars, international internship programmes, job opportunity fairs, a web-portal with updated information on lectures etc. at the University and the establishment of collaborative and exchange agreements with Southern partners. In this set-up, discipline-specific research and the management responsibility for research projects and educational programmes, have been maintained at department level.

Without continuity of core funding and sufficient numbers of students to maintain interdisciplinary centre finances, centres are subject to retrenchment as external research grants reach their end and priorities change within universities. For example, this happened with the Centre for Research in the Humanities at the University of Copenhagen, which was financed by the Humanities faculty and the Danish Research Council in the Humanities. The centre, which lasted for some five years, organised a number of international colloquia, sponsored some major publications and published a journal (Culture and History). Participants could be freed up from their own departments for up to two years and there were a large number of invited researchers in residence. The Centre was, according to the evaluation, a great success in most respects.

In Sweden, the Lund Research School in Anthropology/Sociology/History offered courses for three faculties: the Social sciences, Humanities and Theological faculties with financing from the Swedish research council in the social sciences. The courses were attended by several hundred PhD students. The credits for such courses were taken out in their home departments. In conjunction with such courses there were international guests who stayed from a number of days to a week each and participated in the courses as well as doing a kind of supervisory work in special seminars in which PhD students presented their research. The school was immensely popular since it did not compete with departments. It was only a supplement to students' research work. The school only lasted for four years.

In Finland, the Helsinki Centre of Excellence on global governance financed by the Academy of Finland was a multidisciplinary endeavour focused on issues of governance with conferences and publications covering a broad spectrum of issues. The Centre received high grades from an evaluation, but it only lasted from 2006 to 2011.

In South Africa, an interdisciplinary approach was adopted in creating the South African Research Chair in Development Education, which was established in 2008. The Chair is funded by the Department of Science and Technology, administered by the National Research Foundation and hosted by the University of South Africa (UNISA), which has positioned itself as "the African University in the service of humanity". The Chair is an example of inclusive innovation: "knowledge creation, acquisition, absorption and distribution efforts targeted directly at meeting the needs of the low-income population". The Chair introduces a new pedagogy in academic research and citizenship education, which takes development and the acute lessons drawn from it as a pedagogic field and human development as the goal. Its exploration through research, post-graduate teaching, and community engagement seeks answers to some of the most taxing and exciting questions about development, knowledge production and science. The Chair has implemented a ground-breaking strategy in knowledge production and partnerships that brings together world distinguished scholars and thinkers from a wide range of disciplines (quantum physics, law, peace, education, economics and political science) into dialogue and leading sages of indigenous knowledge systems on heuristics within a paradigm of restorative action. Annual retreats bringing together these stakeholders into dialogue have been organised during the past ten years. There is leading work in systematising and optimising the Third Mission of Universities, that of community engagement, by pushing for new philosophies of practice, clearer and more coherent methodological strategies in inclusive partnership building.

⁵³ URL: www.globalhealth.ku.dk

In summary, there is no easy way of stimulating cross-disciplinary global and development-related research and education within the established University structures of faculties and departments. Research centres are transitory by their very nature, innovative research is no longer new once it has been done, and centres of research excellence need to be focused on exciting novel approaches. However, much can be achieved by removing administrative barriers to inter-departmental research and education by ensuring that student supervision and teaching is appropriately rewarded, and by creating university-wide “hubs” on strategic priority areas. Streamlining allocation of financing for interdisciplinary research to ensure smooth funding flow was a key consideration mentioned by many of the units interviewed.

7 Strengths, weaknesses and challenges

7.1 Strengths, weaknesses and challenges

This section is arranged in the classical SWOT format based on the following concepts and definitions:

- Strengths: internal helpful characteristics of the project that give it an advantage over others.
- Weaknesses: internal harmful characteristics that place the project at a disadvantage relative to others.
- Opportunities: external helpful elements that the project could exploit to its advantage.
- Threats: external harmful elements in the environment that could cause trouble for the project.

Because the current evaluation is primarily inward facing, and mainly concerned with activities within the University of Bergen, the external opportunities and threats are not covered in detail as these relate to the dynamic and changing context for both partner institutions and funding opportunities.

Strengths

There are significant strengths at the University of Bergen in global and development-related research, which has not only created world-class research, but also significant internationalisation. There is a long tradition of this type of research across the University, giving rise to some internationally recognised departments. For example, to mention just a few, the Panel recognised that the Department of Social Anthropology is one of the foremost anthropological institutions in the world and it has done an excellent job in promoting and developing the priority area. The Department of Earth Science's major strength is the global scope of the projects that have been in progress for some years. The Centre for International Health has been awarded a Centre of Excellence for research on child and maternal health. The Centre for Development Studies, established in 1986, has continued in various forms over time and is now represented by the unit UiB Global. The unit and its previous forms have an impressive publication record. UiB Global as a major source of infrastructural support for high quality work is a strength, particularly for scholars working outside of the larger groups, such as in sociology. Collaboration between UiB and local partners, such as with the Chr. Michelsen's Institute in the Bergen Resource Centre for International Development, is a major strength, especially for dissemination of the strategic priority research to a wider audience. The Resource Centre represents a unique meeting point between scholars, students and the public.

Education within the priority area was also recognised by the Panel as a major strength in many departments. During the interviews it was clear that a strength of the education programmes is their strong recruitment, a good relationship of masters programmes to PhD research, and excellent PhD completion rates. In the Department of Comparative Politics the strengths identified are in relation to a good academic environment within development studies, PhD education and international

publications, and the existence of initiatives such as the Bergen Summer Research School organised by UiB Global, which provides a stepping stone for PhD education and for international contacts. In the Department of Administration and Organization Theory the Master's Programme in Public Administration is also considered a bridge for international contacts. For the Department of Geography, an identified strength is international PhD education and publications.

The Panel recognises the strength of commitment to an interdisciplinary research environment, evidenced in cross disciplinary research groups and projects, in many departments. This recognition was echoed by, for example, the Department of Economics and Department of Health Promotion and Development., which in addition to recognising the cross-disciplinarity of the research groups, also mentioned the ability to engage with academic and non-academic communities in the global South, longstanding work in global and development related research and the stable critical mass of staffing. The relatively large size of some of the research theme areas also promotes cross-disciplinary work. The Department of Archaeology, History, Cultural Studies and Religion cited as strengths in the department the number of those working on Middle Eastern and African studies enabling cross-disciplinary research. In the Department of Foreign Languages the strengths were considered to lie in its versatility and potential to be interdisciplinary as demonstrated in the Caribbean and Latin American research groups. The Centre for International Health combines the focus on a specific research area, resulting in a Centre of Excellence, with a broad cross-disciplinary approach to health in developing countries. UiB Global runs the large cross-disciplinary Nile Basin Research Programme, involving 11 African countries and numerous African guest researchers, and is the hub for several regional networks across disciplines, functioning as an important meeting place for academics, and for several research groups composed of researchers from diverse parts of the University and Southern partner institutions.

General recognition from the University of the area of global and development-related research was considered by the Panel to be a strength. UiB Global stressed the need for a coordination framework by the University community. Some of the interviewees referred to this as a "platform" that would guide the interactions among the faculty members on the global stage. The Panel agreed that strength lay in leadership by the Rector and his office in the commitment of the University to ensuring an integrated approach to addressing global development challenges, building on existing programmes and collaboration that provide a basis for growth in the global development agenda.

Examples of global and development-related research at UiB, case 7:

The Centre for Intervention Science in Maternal and Child Health – a Norwegian Centre of Excellence hosted by the Centre for International Health

In 2013, the Centre for Intervention Science in Maternal and Child Health (CISMAC) was awarded status as a Centre of Excellence by the Research Council of Norway. The Centre is a consortium hosted by CIH, with partner research institutions in Ethiopia, India, Nepal, South Africa, Uganda and Zambia. The consortium also includes the Chr. Michelsens Institute, the Norwegian Institute of Public Health and the World Health Organization.

CISMAC performs intervention studies, including tests on the effect of various measures, such as vaccination programmes and maintaining proximity of underweight children to their mothers, in order to provide solutions to high infant mortality.

Weaknesses

The major weakness was considered to be the lack of administrative and collaborating structures that facilitated working across departments and faculties. UiB Global was concerned that the unit is expected to straddle basic and applied research in all faculties and across disciplinary boundaries, which would require developing clear collaboration structures, and that there were bureaucratic and logistical challenges within the University that negatively impact on the capacity of UiB Global to fulfil

its mandates. Other departments repeated this sentiment. The Department of Health Promotion and Development felt there are barriers that inhibit collaboration across departments and faculties, resulting in projects (and funding) located in other departments and work from staff in this department going unrecognised. The Department also mentioned that there is some intra-university competition with heads of department/faculty resisting collaborative research across faculties/departments, and that there were inflexible reporting systems that fail to record and recognise the large volume of teaching and supervision that takes place in the global South.

Inevitably staff shortages were recognised as weaknesses by the departments. For example, the Department of Economics considered that there is need for more positions within development economics as well as more financial support. The Department of Health Promotion and Development was concerned that two professors are close to retirement, and the Department of Administration and Organization Theory felt that weaknesses for the department are the limited capacity for expansion, limited contact with other communities within and around the University, and challenges relating to replacing those retiring. The resource library for Middle Eastern Studies is a major asset now housed within the Bergen Resource Centre for International Development, but its staffing has been reduced to the extent that the source collection is not developed and the needs of researchers and the public are not met. UiB Global was concerned that there was limited capacity (both human and financial) at the unit to fulfil its mandates, which cut across disciplines, departments, centres and faculties.

The Panel recognised that a principal weakness is a shared understanding of global and development-related research, and whether this should be inherently cross-disciplinary or built on disciplinary excellence. So, whilst some faculties and departments were strongly committed, this was not shared by all. This may be partly due to a lack of a clear conceptual understanding of what “belongs” and indeed, what could be developed, and also the lack of a strong central driver, if indeed one exists in such a broad field of research. Cross-disciplinarity is considered by the Panel as a strength, but some departments stayed within their disciplines, and so this could be regarded as a weakness as the full potential of the research was not realised. For example, the Department of Physics and Technology needs to develop more stable cross-disciplinary cooperative activities in order to attract both funding and staff. In the Department of Earth Science, the main weakness is the lack of collaboration with the social sciences and humanities. The Department of Comparative Politics mentioned the challenge of being able to create courses and programmes that are cross-disciplinary. The Department of Geography noted that challenges include having few arenas for cross-disciplinarity at UiB.

The Department of Archaeology, History, Cultural Studies and Religion felt that the fora for cross faculty interdisciplinarity were being challenged and that there is a shift of focus to the “basic entities” of departments. The Department of Geography considered that the leadership should make research activities known to relevant funding institutions including Ministries, Embassies and Norad especially after the closing down of Unifob Global. Due to the reorganisations discussed in Section 1.2, most research activities now go on in faculties and departments and more resources are therefore required than if there was a central coordinating unit supporting research activities in the priority area, a task that could be performed across the university by UiB Global if it was adequately resourced.

The several rounds of reorganisation at UiB in recent years were also considered to be a weakness. The University as whole underwent several reorganisations in the period 2004 – 2009, and the establishment of Unifob Global as a department in UiB’s research company Unifob meant that components of the strategic priority area of global and development-related research were moved out of the University. As a result, the academic production and related activities of the predecessor to UiB Global were not attributed to the University. Moreover, important institutional “memory” has been lost or hidden because of changing systems and an increased turnover of experienced staff. CIH expressed concern that the merger into a department has undermined its capacity to invest overheads in new staff skills, and that generally, the focus and priorities have been diluted.

In education, Master's programmes developed for students from the South do not seem to be coordinated to provide benefit of other UiB students.

In summary, the Panel recognises two principle weaknesses: 1. A lack of administrative processes; and 2. A lack of a clear organisational model. The administrative processes refer to budget flows across departments and faculties creating barriers to teaching and supervision outside of the core departments. This then results in a lack of support by departmental heads who perceive little benefit from staff teaching and supervising across departments. In terms of the organisational model, UiB has undergone a series of reorganisations over time, with various permutations of a central model to decentralisation in departments.

Opportunities

There are major opportunities in the area of global and development-related research at UiB. UiB Global recognised the increasing national and international research policy focus on global challenges with the potential for resource mobilisation. This not only opens exciting research possibilities and concomitant societal impact, but also streams of external funding. For example, there are significant new opportunities for funding for global development interventions, such as Horizon 2020.

The Faculty of Law noted that, since global and development-related research is multidisciplinary, there is need for meeting places or what one interviewee called a market place. One strategy suggested could be to create a cross-disciplinary centre for global and development-related research by bringing together scholars working in this field within the social sciences, humanities and natural sciences using UiB Global as the central coordinating hub for collaboration in both research and education.

Threats

As with any research area, funding is competitive. Competition from other universities for funding and attracting students was mentioned during the interviews with the social science departments as an external threat. UiB Global noted the rapidly changing conditions for accessing external funding. Some funding agencies have their own areas of interest and countries of focus that may be at variance with the UiB priorities. In some subjects, such as pre-historic archaeology, religion and language, research is development-related in that it pertains to countries' cultural situations, but may not be directly linked to the funding agencies' focus on poverty. As such, there is a perception that researchers within the humanities can find funding a challenge as they consider that large research calls are not generally directly aimed at their areas of research. The Department of Foreign Languages considered that there is a missed opportunity that is simply thwarted by the restrictions of funding flows that would otherwise enable them to capitalise on their strengths. Changes to the national studentship quota funding scheme was also recognised as a threat to some of the taught post-graduate programmes.

Other external threats recognised by UiB Global include diverse political structures and priorities in the partner countries that can negatively affect the partnerships and interfere with the smooth implementation of activities. Climate and ecological changes also demand new thinking and new partnerships. Conflict and wars in partner countries were also considered threats to long term planning and investments.

7.2 Recommendations

Take advantage of the tradition. Global and development-related research at the University of Bergen has a long tradition, which is represented throughout the University, both in disciplinary and cross-disciplinary research and education. This tradition is found not only in fields with concentrations of researchers such as health, social anthropology, geography and biology, but also in disciplines such as law and sociology, where the smaller number of researchers are able to collaborate effectively with the larger groups. Research in the strategic priority area not only takes place in large

interdisciplinary projects, such as the Nile Basin Programme, but also in focused technology transfer, such as optical physics to Uganda and Tibet. A long standing tradition leads to strength in depth across the University as a whole, and development of a globally recognisable “brand” in the strategic priority area, which is important for attracting highly qualified staff, world class visiting scholars and external funding.

Recommendation 1: The University of Bergen should retain global and development-related research as a strategic priority area and ensure that all research in the priority area is represented in the University’s publicity and policy.

Maintain the high standard. There is no doubt that global and development-related research at UiB is of a high standard across the departments and research groups evaluated, as assessed by the number of publications in peer reviewed journals, international reputation, impact and uptake of the research, and co-authorship with partners in the South, demonstrating the level of collaboration, capacity building and relevance to the prioritised area of research. Examples of national and international recognition of excellence include the Centre of Excellence at CIH and the ERC Advanced Grant in the Department of Social Anthropology. Many other groups and individuals conducting innovative research of a high standard with strong publication records were encountered during the evaluation, some examples of which are given in this report, including both theoretical research and area studies. Excellence needs to be recognised and research groups and individuals supported administratively in bids for funds that will enable them to continue pursuing world-class innovative research. New “blue skies” thinking should be supported with seed-funding to enable researchers to produce initial proof of concept publications so that they can then seek more substantial funding opportunities.

Recommendation 2: The University should proactively identify groups and individuals conducting exciting innovative research across the spectrum of activity in the strategic priority area and promote two to four of them annually to form competitive ‘centres of excellence’ that will enable them to obtain funding at national, European and international levels.

Develop university-wide structures for inter-departmental/ faculty collaboration in research and education. The lack of appropriate mechanisms and incentives within the University was consistently cited as a major barrier to cross- and interdisciplinary research. Without sufficient incentives, faculties defend their disciplinary boundaries strongly on both financial and academic grounds. Research centres and groups are transitory by their very nature, as once completed, research may no longer be innovative. However, a facilitating environment is needed to support research to gain critical mass as it emerges, and to enable cross disciplinary collaboration, as innovations often occur at disciplinary boundaries. The fact that a cross disciplinary unit, UiB Global, has passed through so many incarnations and reorganisations despite being highly productive, illustrates the presence of fundamental underlying barriers and tensions. The question arises as to other cross-faculty research units in the future, or in the past (such as CIH with its strong record of excellence), should also be independent departments, or whether this will lead to continued tortuous reorganisations as policy and university priorities change. A solution could be to create a credit transfer system between departments and units for teaching, supervision, publications, administrative support and research income, that would enable effort to be appropriately rewarded within the relevant cost centres, whilst coordination is achieved through topic-orientated ‘hubs’. Two components are needed. Firstly to create university-wide structures to enable collaboration. Secondly to create an organisational model for global and development-related research for the future, recognising that a strong commitment to this theme during the 1980s and 1990s led to a central organisation that successfully established UiB as a leader. The keys to success are wide consultation and designing an institutional matrix that rewards effort through effective incentives.

Recommendation 3: Reorganise university-wide time-allocation systems so that inter-departmental and cross-faculty teaching and student supervision is recognised and appropriately accounted for.

Recommendation 4: Review the options for organisational delivery with university-wide consultation. For example: a central model directly under the university leadership; a matrix model with established centres in faculties; an ad hoc model of emerging research groups; a hub topic model across departments with clusters around topics. A practical solution for UiB may involve a combination of these models, though it must have clarity of purpose.

Students need interdisciplinary skills. The current emphasis by major funding and administrative organisations on large interdisciplinary projects and policy means that students need to acquire skills for placing their knowledge into an interdisciplinary context, even if it is from the position of an in-depth analysis within a single discipline. A common problem across universities, including at UiB, is that students and staff simply do not know what goes on in other departments or educational programmes. A way of stimulating collaboration and networking across disciplines and research traditions is to improve on the effective information exchange, especially targeting master and PhD level students. The Bergen Summer Research School is a good example of opportunities for students to acquire these skills. The Bergen Resource Centre for International Development also provides a forum for events showcasing research across disciplines. Participating in, and presenting at, these events should be an integral part of a student's education. A separate issue is the need to increase the linkage between international students in dedicated Master's programmes (for example those covered by the aid programmes of the Norwegian government) and other students.

Recommendation 5: Enhance information exchange on interdisciplinary educational opportunities across the University, and create new forums if necessary.

Recommendation 6: Encourage students to participate through credit-rating for interdisciplinary courses in Master's programmes and competitions for PhD student presentations.

Recommendation 7: Continue support to the Bergen Summer Research School and the Bergen Resource Centre for International Development.

Build bridges to academic communities in UiB's periphery. Local academic partner institutions can offer skills, expertise and networks that can enable and enhance global and development-related research at UiB (the partner institutions are listed in Section 5.2). Many research units have good contact and partnerships with these local academic partner institutions, but not all do, and may not be aware of the full potential available. The more technical science and medical groups have a lower level of contact than the humanities and social sciences. UiB Global is an important mediator in establishing local collaborations and is in a position to stimulate interactions when this is likely to lead to developing productive relationships.

Recommendation 8: Enhance the role played by UiB Global in developing partnerships with local academic partner institutions and facilitate dialogue between the partners and research units who do not currently engage with them.

Develop reciprocal partnerships. Global research is international research activity that can only take place on a world stage, and requires active reciprocal participation from collaborating partners. Many departments are conducting this type of research through collaborative agreements and this testifies to the high priority placed on this type of activity by the University central administration. Long-term reciprocal partnerships, such as that established with Makerere University in Uganda, provide the potential to launch new research activities when opportunities arise. Consolidating meaningful partnerships through continued recognition will keep them active and responsive. Maintaining partnerships, initiating new partnerships and getting the benefits of partnerships require that UiB has centres or departments with the incentives and resources to invest in long-term partnerships even when funding is between peaks. There should also be sufficient resources to facilitate the involvement of small specialised groups across UiB.

Recommendation 9: Strategically maintain partnerships with long-term research and education partners in the South through support to a unit, such as UiB Global, tasked with developing research and education projects with the partners.

Work with alumni. Alumni provide a platform for both future research activities and on-going capacity building through continuous professional development. Many departments maintain excellent links with individual alumni, and use these links as the basis for future research. A coordinated alumni programme in the strategic priority area would enhance the existing links and stimulate new ones. Over the coming years UiB will have to develop activities that more actively support student and future employer interaction. This is likely to be required by future government directives, will improve on the relevance of studies and provide new opportunities for students. UiB will need to invest in “job opportunity fairs”, and develop more diverse internship programmes, student interest organisations and their involvement with civil society and the private sector, and broaden and increase summer school activities. The alumni network can play a central role in all of these activities.

Recommendation 10: Maintain and enhance alumni networks, engaging them in continuing research and educational activities at UiB.

Prioritise dissemination and societal impact. The rating of academic publications depends on the ranking of journals and numbers of citations, but not on impact at the policy and operational levels. However, increasing emphasis is now being placed on societal impact, and appropriate dissemination is an important part of achieving this. Many departments and research groups have diverse routes for dissemination and achieving social impact. Of particular note are film documentaries and the television series on the History of Water and the Nile, the dissemination of which is supported by UiB Global and the Bergen Resource Centre for International Development. Global availability of the internet also opens opportunities for web-based education. Social impact is most readily achieved by working closely with implementing agencies, such as the World Health Organisation as is done by some of the health related research units at UiB, and partners in the global South. If societal impact and wide dissemination is not an integral feature of research in the strategic priority area, then research groups should be assisted to ensure that their work gains traction in both policy and implementation. Development research is often funded by donor organisations, so in dissemination it is important to emphasise the importance of critical and challenging thinking, so that research does not become an appendage of the politically motivated agendas that drive donor aid. Stepping further, dissemination can embrace transdisciplinarity which moves beyond interdisciplinary combinations of academic disciplines by engaging in debates between researchers and the society at large as a way of discovering bridges between different knowledge systems.

Recommendation 11: From the outset, design projects with social impact and communication strategies and have expertise available to advise on how to best do this.

Seek new funding opportunities. The funding environment is dynamic and researchers have to constantly reinvent themselves in order to keep abreast with changing sources and policies associated with funding opportunities. For example, the EU Horizon 2020 programme launched in 2014 has nearly €80 billion of funding over seven years (to 2020). Horizon 2020 contains many cross-disciplinary calls relevant for global and development research. Societal impact and partnerships with the private sector and implementing agencies is often a requirement for the proposals. Having a unit that can help locate and guide researchers to relevant calls and partners will assist UiB obtain funds from Horizon 2020 and other funding opportunities.

Recommendation 12: Ensure that the Division of Research Management, as well as the faculty and department administrations, are actively informing researchers working in the priority area of global and development-related research of suitable opportunities and assisting with partner searches and preparation of applications.

References

UiB Sources

Bergen Summer Research School – Global Development Challenges. BSRS 2008-2011, report prepared by Kjersti Fløttum, BSRS, 2011

«Development research at UiB 2004-2013 – Contributions by CROP», International Social Science Council/CROP Secretariat

Evalueringsrapport Unifob Global

Facts & Figures 2013. University of Bergen, the webpages of UiB, URL:
http://www.uib.no/sites/w3.uib.no/files/attachments/uibfactsfigures_213.pdf

«Gjenoppnevning av strategisk utvalg for utviklingsrelatertforskning», 2012

Meeting global challenges – Long-term intercontinental university collaboration. Evaluation of the Makerere-UiB Collaboration, report from evaluation workshop 18-19 November 2009, UiB and the University of Makerere

«Notat til RUFUs medlemmer for 1998-2001, i forbindelse med møte om oppsummering av erfaringer fra RUFUs første periode»

«Oppnevning av strategisk utvalg for utviklingsrelatert forskning», 2009

«Organisering av utviklingsrelatert og global forskning ved Universitetet i Bergen. En gjennomgang av situasjonen for Unifob Global, 2009»

«Råd for utviklingsrelatert forskning og utdanning. Mandat og retningslinjer», 1998

Strategi 2011-2015. Universitetet i Bergen, the webpages of UiB, URL:
http://www.uib.no/sites/w3.uib.no/files/w2/st/strategi_2011-15_web_1.pdf

Strategic plan for UiB Global 2012-2015

«Strategiske forskningsatsinger – status og utviklingstrekk: marin forskning og utviklingsrelatert forskning», 2008

«Universitetet i Bergen – Et Forskningsuniversitet. Utkast til forskningsstrategi 2005-2010», UiB, 2004

«Universitetes utviklingsforskning ved Uni Global – tilbakeføring til universitetet», 2010

«Utviklingsrelatert forskning ved UiB/Unifob AS. Økonomi og personal. Bergen, 14. oktober 2005»

«Utviklingsrelatert virksomhet. Oppfølging av vedtak i universitetsstyret av 9.6.05»

External sources

End Review of the Nile Basin Research Program, Phase 1, report commissioned by Norad, Pöyry Report R-2013-015

Globale helseutfordringer, delrapport *HelseOmsorg21*, 2014 (report published as part of the national strategy process *Health&Care21*)

Strategi for forsknings- og innovasjonssamarbeidet med EU. Horisont 2020 og ERA, Kunnskapsdepartementet, 2014 (national strategy for research and innovation cooperation with the EU published by the Ministry of Research)

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Appendix 1

Evaluation of Global and Development-related Research at the University of Bergen (UiB)

Self-Assessment Report 2004-2013

Department/centre at UiB to be included in the evaluation:

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Introduction and general instructions

The present evaluation is initiated by the University of Bergen (UiB) in order to have a systematic review and assessment of the strategic priority area global and development-related research at UiB. Whereas global and development-related research has been a strategic priority at the university since the 1980s, the focus of the evaluation is on the last ten-year period (2004-2013).

The evaluation is conducted by an international evaluation panel, appointed by UiB, with secretarial help from NIFU. The panel is mandated to evaluate the quality and relevance of the scientific production and educational programmes (at master and doctoral level) within global and development-related research at UiB, as well as the dissemination activities, cooperation with institutions in UiB's periphery (*randsonestitusjoner*) and international activities of the associated academic communities.

In order to do so we need a wide set of information about the activities of the units conducting global and development-related research at UiB. Against this background, we ask the departments/centres involved in global and development-related research to fill in this self-assessment report template. The self-assessment template follows the Terms of Reference (ToR) for the evaluation. Each item in the template quotes the ToR-questions to be addressed, and asks for relevant information about the unit/its activities in the ten-year period to be evaluated, as well as the unit's experiences and assessments.

The evaluation panel will evaluate quality and relevance in a broad sense and not only in terms of scientific publications and funding. The units are therefore encouraged to highlight the aspects of their research and education that they consider to be significant and to have societal impact/value.

When deciding which parts of the unit's activities to include in the report please note that the University of Bergen specifies that the strategic priority area global and development-related research

“embodies important global and local challenges for poor countries and the basic needs of humans, opportunities and processes for development related to these challenges, and human rights, resource issues and sustainable development.”

The evaluation panel acknowledges that some units may encounter difficulties in applying this definition. If there are sections (or parts of sections) in the template where the question of delimitation makes it difficult for your unit to provide the requested quantitative and/or qualitative information, you are free to leave them open. The panel furthermore invites you to elaborate on any difficulties you have encountered, and on how you delimited which activities to include, in the open comment space at the end of the template.

Note that your department/centre should return only one self-assessment report. However, if you have several major research topics/research groups within global and development-related research, we ask you to provide information specified by research topic/research group where this is relevant.

To avoid double counting, please coordinate your reporting with other departments/centres involved in global and development-related research at UiB. As a general rule, you should report the activities of researchers holding a main position at your unit.

The self-assessments will, together with other data sources, form the basis for a review and assessment of the strategic priority area global and development-related research at UiB as a whole. There will not be separate evaluations of the research units.

Please send the completed self-assessment to NIFU by 8 September 2014 (siri.aanstad@nifu.no). The self-assessments will not be published or distributed to other parts of UiB.

1. Background information: thematic areas and resources

Please use the boxes in each section to specify your activities and views.

a) Thematic areas of global and development-related research: In the table below, list your major research topics/research groups and projects (2004-2013).

Major research topics/Research groups (2004-2013)	Major research projects (2004-2013)

b) The department/centre's academic personnel in global and development-related studies (research and/or teaching)

	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Total number of staff involved										
Number of staff involved in the field more than 50% of their time										
Full time equivalents (FTEs) in the field:										
Professors (<i>professor/førsteamanuensis/andre førstestillinger</i>)										
Other permanent academic staff										
Postdoc fellows										
PhD fellows										

If relevant, please specify the size of your major research topics/research groups within global and development-related research relative to the size of the department/centre and describe the main developments in academic personnel (growth/reduction) for these groups in the period 2004-2013.

c) Funding of research activities: Please fill in the department/centre's total expenditure for global and development-related research by funding source (in 100 000 NOK).

Source	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Institutional core funding (total)										
- funding received from UiB's strategic priority of global and development-related research										
Grants from the Research Council of Norway										
Other Norwegian public funding (ministries, directorates/agencies, etc)										
Private domestic sources (industry or NGOs)										
Funding from abroad										
Sum										

If relevant, please describe the main developments in research funding (growth/reduction) per major research topic/research group in the period 2004-2013.

2. Scientific production and societal impact

ToR: "On the basis of international standards to assess the quality and relevance of the scientific production within global and development-related research based on the combined production of publications and theses, with emphasis on the last 10 years."

The panel will assess UiB's overall scientific production within the field based on bibliometrics/publication lists extracted from Cristin and Web of Science. As additional information and background to interpret the bibliometric data we would like input on what you consider the department/centre's main achievements and most significant publications within the field. Five to ten publications per major research topic/research group should be listed.

Note that the panel is interested in societal as well as academic impact and that this should be the publications the researchers consider to be the most significant, and not necessarily only academic publications.

Please provide full references to each publication.

The most significant publications per major research topic/research group, 2004-2013:

--

If global and development-related research at your department/centre has had clear societal impact in the period 2004-2013, please provide examples below. Describe the research performed and its relevance, use and impact. The examples should be ranked in order of significance (starting with 1. for the most significant use/impact).

--

3. Education at master and doctoral level

ToR: “Evaluate the quality and relevance, including the development of expertise and level of execution, of the area’s combined educational programs at the master and doctorate level with emphasis on the last 10 years.”

If your department/centre has offered/contributed to Master’s or Ph.D. programmes in global and development-related studies at UiB in the period 2004-2013, please list the names of the programmes.

Educational programmes in global and development-related studies 2004-2013:

Master programmes:	Ph.d. programmes/research schools::

Please provide information on other master and doctoral level education in global and development-related studies at UiB that your department/centre has offered/contributed to in the period 2004-2013 (e.g. courses/lectures/supervision within disciplinary Master’s and Ph.D.-programmes).

--

Describe and comment on how the education in global and development-related studies your unit has been involved in has developed in the period 2004-2013 (scope of programmes/courses, recruitment of students, completion and other relevant issues).

--

Please provide examples of the career trajectories of Ph.D.-candidates within global and development-related studies and describe the role your unit has played in the career development of the candidates (e.g. career advise, engaging with relevant employers).

4. The significance of UiB's strategic priority of global and development-related research

ToR: "With the additional resources that accompany being a main focus area in mind, give a combined assessment of the strategic added value/utility this has provided."

Please describe the types of added resources your department/centre has received through UiB's strategic priority of global and development-related research in the period 2004-2013 (e.g. Ph.D.-positions, infrastructures). Refer to amounts reported in section 1 c) where relevant, and comment on the added value of these resources for your research and education activities; that is, what results you would not have achieved without the additional resources.

5. Cooperation with academic communities in UiB's periphery (randsonen)

ToR: "Evaluate the associated academic communities' cooperation with relevant academic communities in UiB's periphery, including organization, participation in projects, ability to generate resources and networking."

If relevant, please report separately for your major research topics/research groups in this section.

Please describe how your cooperation with relevant academic communities in UiB's periphery (*randseinstitusjoner*) has developed in the period 2004-2013, including developments in the role such cooperation has played in your ability to generate resources and build networks.

6. Dissemination activities and international cooperation

ToR: "Evaluate the associated academic communities' dissemination and promotion of their research results domestically and internationally."

ToR: "Evaluate the associated academic communities' international activities, including developing expertise abroad ("impact"), project cooperation, participation in conferences, presentations, marketing and networking."

If relevant, please report separately for your major research topics/research groups in this section.

Describe the major target groups of your research and the major channels for disseminating and promoting your research results domestically and internationally. Please comment on the relative importance of academic/popular and of domestic/international dissemination.

Describe and comment on how the dissemination and promotion of your global and development-related research has developed (e.g. increase/decrease in activity level, new dissemination and promotion channels) in the period 2004-2013.

Please provide a list of your department/centre's most significant *domestic* dissemination activities (apart from scientific publications) in the period 2004-2013 (extracted from Cristin where possible). Categories to be included:

- contribution at conferences
- popular/user-oriented talks
- popular articles
- media contributions (newspapers, TV, radio, film, blogs, etc.)

Please provide a list of your department/centre's most significant *international* dissemination activities (apart from scientific publications) in the period 2004-2013 (extracted from Cristin where possible). Categories to be included:

- contribution at conferences
- popular/user-oriented talks
- popular articles
- media contributions (newspapers, TV, radio, film, blogs, etc.)

List your international projects in the period 2004-2013, and comment on the development in international project cooperation in the period.

Describe other central international activities your department/centre has been involved in in the period 2004-2013, and comment on the development in these activities in the period. If relevant, report specifically on your involvement in building expertise abroad.

7. Cross-disciplinarity

ToR: "Consider to which extent cross-disciplinarity and organization in cross-disciplinary centres has contributed to strengthening and developing activities in the focus area."

If relevant, please report separately for your major research topics/research groups in this section.

Please comment on the degree of cross-disciplinarity of your research and education activities, and the extent to which cross-disciplinarity and organisation in cross-disciplinary centres have contributed to strengthening the research and education activities within global and development-related studies at UiB in the period 2004-2013.

8. UiB's strategic committee for global and development-related research

ToR: "Assess utility value/function of the strategic committee for this focus area."

Please comment on your department/centre's experiences with UiB's strategic committee for global and development-related research, its value/function for developing the field, and if relevant how the organisation of the focus area may be improved.

9. Administrative resources and support

ToR: "Assess the associated academic communities combined administrative resources and support functions."

Please describe the types of administrative resources and support available to your department/centre, and give your opinion on the adequacy/sufficiency of the resources and support, and if relevant what ought to be improved.

10. Strengths, weaknesses and challenges

If relevant, please report separately for your major research topics/research groups in this section.

Please describe what you see as the main strengths, weaknesses and challenges for research and education within global and development-related research at UiB, and how the field should be developed further.

11. Additional information/comments

For additional information or comments to the evaluation panel, please use the space below.

Appendix 2

Site visit interview plan

	Monday October 13 th	Tuesday October 14 th				Wednesday October 15 th	
Time	10.00-12.30/15.00-16.30: 1. 10.00-11.30: interview 1 2. 11.30-12.30: interview 2 3. 15.00-16.30: interview 3	9.00-12.30: 4. 9.00-10.30: interview A1 and B1 5. 11.00-12.30: interview A2 and B2		14.30-16.00: • 14.30-16.00: interview C1 and D1		9.00-10.30: 1. 9.00-10.30: interview E1 and F1	
Track	-	A	B	C	D	E	F
Panel members	All	Jon Lovett, Jonathan Friedman, Beth Maina Ahlberg	Mary Amuyunzu-Nyamongo, Jane Wills, Flemming Konradsen	Jon Lovett, Jonathan Friedman, Jane Wills	Mary Amuyunzu-Nyamongo, Beth Maina Ahlberg, Flemming Konradsen	Flemming Konradsen, Mary Amuyunzu-Nyamongo, Beth Maina Ahlberg	Jane Wills, Jon Lovett, Jonathan Friedman
Interviews	1. <u>UiB central leadership</u>	1. <u>Faculty of Social Sciences:</u> - Dept. of Social Anthropology - Dept. of Sociology	2. <u>Early career researchers</u>	1. <u>Faculty of Mathematics and Natural Sciences:</u> - Dept. of Physics and Technology - Dept. of Earth Science - Geophysical Institute - Dept. of Chemistry	2. <u>Faculty of Mathematics and Natural Sciences:</u> - Dept. of Biology	1. <u>Faculty of Medicine and Dentistry:</u> - Dept. of Clinical Medicine (K1) - Dept. of Clinical Science (K2) - Dept. of Clinical Dentistry - Centre for International Health	2. <u>Faculty of Humanities:</u> - Dept. of Archaeology, History, Cultural Studies and Religion - Dept. of Foreign Languages - Centre for the Study of the Sciences and the Humanities
	2. <u>UiB faculty leadership</u>	2. <u>Faculty of Social Sciences and Faculty of Law:</u> - Faculty of Law - Depart. of Comparative Politics - Dept. of Administration and Organisation Theory	2. <u>Faculty of Psychology:</u> - Dept. of Health Promotion and Development - Dept. of Education				
	3. <u>UiB Global</u>	- Dept. of Geography - Dept. of Economics - Dept. of Information Science and Media Studies					

Appendix 3

Tables

Table A1 Total number of staff involved in global and development-related studies (research and/or training) at UiB, by department and year, 2004-2013

Department/Unit	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Social Anthropology	15	15	18	17	17	14	15	15	20	21
Sociology						1	1	1	1	1
Geography	6	8	8	9	9	9	9	12	14	14
Economics	2	3	5	6	7	7	8	6	5	5
Information Science and Media Studies	1	1	1	1	1	2	2	2	2	2
Health Promotion and Development	9	12	15	17	17	20	21	21	23	23
Archaeology, History, Cultural Studies and Religion (est. 2007)	15	15	15	17	19	20	20	20	20	20
Centre for the Study of the Sciences and the Humanities							2	3	3	3
Earth Science	2	2	2	3	3	4	4	4	4	4
Chemistry	3	3	3	3	3	2	2	3	3	5
Biology	10	10	12	12	16	18	17	16	14	12
Law				1	3	3	4	7	8	6
Centre for International Health	22	23	30	24	29	29	28	28	31	31
Clinical Medicine (K1)	9.5	10.5	12.5	11.5	11.5	12	11.5	14	13.5	13.5
UiB Global	6	8	10	23	21	20	17	5	6	6
Sum info from 15 units	100.5	110.5	131.5	144.5	156.5	161	161.5	157	167.5	166.5

Comment: The table only includes figures for the 15 units which specified total number of staff involved in global and development-related studies.

Source: Self-assessment reports

Table A2 Number of staff involved in the field more than 50% of their time, by department and year, 2004-2013

Department/Unit	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Social Anthropology	12	12	12	12	12	12	12	12	12	12
Comparative Politics	6	7	8	9	9	11	9	12	12	12
Economics	1	1	3	5	6	6	6	4	5	5
Information Science and Media Studies	1	1	1	1	1	2	2	2	2	2
Health Promotion and Development	6	8	9	12	14	14	13	16	17	14
Archaeology, History, Cultural Studies and Religion (est. 2007)	12	12	12	14	16	17	17	17	17	17
Centre for the Study of the Sciences and the Humanities							1	1	1	1
Earth Science	0	0	0	0	0	0	0	0	0	0
Chemistry	1	1	1	1	1			1	1	1
Biology	8	8	8	8	8	10	10	8	8	5
Law				0	1	1	2	3	3	3
Centre for International Health	15	15	17	21	22	22	22	18	18	18
Clinical Dentistry (cooperation with CIH)	1.5	1.5	1.5	1.5	1.5	1.5	1	1	1	1
Clinical Medicine (K1)	6.5	7.5	9.5	8.5	8.5	9.5	8.5	10	10.5	10.5
Sum info from 14 units	70	74	82	93	100	106	103.5	105	107.5	101.5

Comment: The table only includes figures for the 14 units which specified number of staff involved in the field more than 50% of their time.

Source: Self-assessment reports

Table B1 NUFU-projects, UiB, 2007-2012

Nr	NUFUPRO	NUFU Projects UiB 2007-2011/12	Period	Budget	CIAsupport	Unit
1	10062	Archaeology and Traditions in eastern Zimbabwe	2007-2011	3 417 499	140 117,46	Global
2	10063	Assessment of microbial pollution and diversity of Escherichia coli and Shigella in freshwater	2007-2011	3 500 000	143 500,00	BIO
3	10069	Biotechnonogy and microbial diversity of Ethiopian soda lakes	2007-2011	5 550 000	227 550,00	BIO
4	10074	Capacity building and research in sub-Saharan Africa to promote survival among HIV-exp	2007-2011	3 499 400	143 475,40	SIH
5	10086	Coastal modelling and fish health II	2007-2011	3 417 330	140 110,53	BIO
6	10095	Cultural heritage for social development: Training, research and archiving in ethnomusicol	2007-2011	2 920 750	110 750,75	Griegakad
7	10099	Democracy consolidation in Malawi	2007-2011	3 175 950	130 213,95	Sampol
8	10119	Essential nutrition and child health in Uganda	2007-2011	3 495 000	143 295,00	SIH
9	10121	Ethiopian malaria prediction system (EMAPS)	2007-2011	3 500 000	143 500,00	SIH
10	10126	Gender, generation and social mobilisation: Challenges of reproductive health and rights a	2007-2011	5 843 000	231 363,00	SIH
11	10129	Globalization and Changes in the cultures of survival and care in Ghana: From capacity bu	2007-2011	3 399 770	139 390,57	Global
12	10130	Governance matters: Assessing, diagnosing and addressing challanges of governance in	2007-2011	2 970 000	121 770,00	Admorg
13	10166	Occupational respiratory diseases among male and female workers in dusty industries in T	2007-2011	3 114 188	127 681,71	SIH
14	10176	Productive learning cultures II	2007-2011	5 353 300	219 485,30	Global
15	10179	Registry based reproductive health in Northern Tanzania	2007-2011	3 500 000	143 500,00	SIH
16	10183	Research and capacity building to address the diagnostic and therapeutic challenges in tu	2007-2011	5 980 000	245 180,00	SIH
17	10196	Strengthening HIV-related interventions in Zambia: co-operation in research and institutio	2007-2011	3 498 000	143 418,00	SIH
18	10210	The role of Ugandan folklores as repository of traditional wisdom	2007-2011	3 493 413	310 288,00	Global
19	Ge2008/10185	Enabling local voices	2008-2012	3 500 000	143 500,00	Global
20	SM 10061	Application for termination of the Lower Jordan River Basin Project	2007-2008	1 022 000	0,00	Global
21	SM 10177	Program to improve child health and	2007-2008	1 325 000	0,00	SIH
22	SM 10227	Applied social psychology and HIV/AIDS	2007-2008	1 096 000	0,00	PSYK
23	NUCOOP 10008	Juba University library automation project	2008-2012	7 627 660	312 734,06	UB
24	NUCOOP 10013	Teaching basic sciences in laboratories and by field studies	2008-2012	7 568 000	310 288,00	BIO
25	NUCOOP 10001	Capacity building: Educating librarians in South Sudan	2008-2012	7 322 000	292 880,00	UB
26	NUFUSA 10001	Analysis of UV-data recorded by	2007-2008	62 700	0,00	IFT
27	NUFUSA 10005	Workshop on HIV and infant feeding	2007-2009	83 000	0,00	Psykol
28	NUFUSA 10203	The role of Ugandan folklores as repository of traditional wisdom	2008-2009	126 500	0,00	Global
29	NUFUSA 10623	Abrogation of anthracyclin-induced cardiotoxicity	2008-2009	211 580	0,00	Biomed
30	NUFUSA 13642	Staff development activities - Coastal Modeling and Fish Health	2009-2010	128 000	0,00	BIO
31	NUFUSA 13645	Scientific equipment and relevant training - Coastal Modeling and Fish Health	2009-2010	203 000	0,00	BIO
32	NUFUSA 10921	Globalization and Changes in the cultures of survival and care in Ghana: From capacity bu	2009-2010	143 000	0,00	Global
33	NUCOOP 11101	Infrastructure for teaching basic sciences... (lab and guesthouse)	2009-2010	4 000 000	164 000,00	BIO
NUFU-PRO TOTAL PORTFOLIO UiB				104 046 040	4 227 991,73	
1	10062	Archaeology and Traditions in eastern Zimbabwe	2007-2011	3 417 499	140 117,46	Global
11	10129	Globalization and Changes in the cultures of survival and care in Ghana: From capacity bu	2007-2011	3 399 770	139 390,57	Global
14	10176	Productive learning cultures II	2007-2011	5 353 300	219 485,30	Global
18	10210	The role of Ugandan folklores as repository of traditional wisdom	2007-2011	3 493 413	310 288,00	Global
19	Ge2008/10185	Enabling local voices	2008-2012	3 500 000	143 500,00	Global
28	NUFUSA 10203	The role of Ugandan folklores as repository of traditional wisdom (Makerere)	2008-2009	126 500	0,00	Global
32	NUFUSA 10921	Globalization and Changes in the cultures of survival and care in Ghana: From capacity bu	2009-2010	143 000	0,00	Global
20	SM 10061	Application for termination of the Lower Jordan River Basin Project	2007-2008	1 022 000	0,00	Global
GLOBAL				20 455 482	952 781,33	
2	10063	Assessment of microbial pollution and diversity of Escherichia coli and Shigella in freshwater	2007-2011	3 500 000	143 500,00	BIO
3	10069	Biotechnonogy and microbial diversity of Ethiopian soda lakes	2007-2011	5 550 000	227 550,00	BIO
5	10086	Coastal modelling and fish health II	2007-2011	3 417 330	140 110,53	BIO
30	NUFUSA 13642	Staff development activities - Coastal Modeling and Fish Health	2009-2010	128 000	0,00	BIO
31	NUFUSA 13645	Scientific equipment and relevant training - Coastal Modeling and Fish Health	2009-2010	203 000	0,00	BIO
24	NUCOOP 10013	Teaching basic sciences in laboratories and by field studies	2008-2012	7 568 000	310 288,00	BIO
33	NUCOOP 11101	Infrastructure for teaching basic sciences... (lab and guesthouse)	2009-2010	4 000 000	164 000,00	BIO
BIO				24 366 330	985 448,53	
4	10074	Capacity building and research in sub-Saharan Africa to promote survival among HIV-exp	2007-2011	3 499 400	143 475,40	SIH
8	10119	Essential nutrition and child health in Uganda	2007-2011	3 495 000	143 295,00	SIH
9	10121	Ethiopian malaria prediction system (EMAPS)	2007-2011	3 500 000	143 500,00	SIH
10	10126	Gender, generation and social mobilisation: Challenges of reproductive health and rights a	2007-2011	5 843 000	231 363,00	SIH
13	10166	Occupational respiratory diseases among male and female workers in dusty industries in T	2007-2011	3 114 188	127 681,71	SIH
15	10179	Registry based reproductive health in Northern Tanzania	2007-2011	3 500 000	143 500,00	SIH
16	10183	Research and capacity building to address the diagnostic and therapeutic challenges in tu	2007-2011	5 980 000	245 180,00	SIH
17	10196	Strengthening HIV-related interventions in Zambia: co-operation in research and institutio	2007-2011	3 498 000	143 418,00	SIH
21	SM 10177	Program to improve child health and	2007-2008	1 325 000	0,00	SIH
SIH				33 754 588	1 321 413,11	
22	SM 10227	Applied social psychology and HIV/AIDS	2007-2008	1 096 000	0,00	PSYK
6	10095	Cultural heritage for social development: Training, research and archiving in ethnomusicol	2007-2011	2 920 750	110 750,75	Griegakad
7	10099	Democracy consolidation in Malawi	2007-2011	3 175 950	130 213,95	Sampol
12	10130	Governance matters: Assessing, diagnosing and addressing challanges of governance in	2007-2011	2 970 000	121 770,00	Admorg
23	NUCOOP 10008	Juba University library automation project	2008-2012	7 627 660	312 734,06	UB
25	NUCOOP 10001	Capacity building: Educating librarians in South Sudan	2008-2012	7 322 000	292 880,00	UB
26	NUFUSA 10001	Analysis of UV-data recorded by NILU-UV multichannel irradiance (Makerere)	2007-2008	62 700	0,00	IFT
27	NUFUSA 10005	Workshop on HIV and infant feeding (Al Ahfad)	2007-2009	83 000	0,00	Psykol
29	NUFUSA 10623	Abrogation of anthracyclin-induced cardiotoxicity (Cape Peninsula Univ. of Techn.)	2008-2009	211 580	0,00	Biomed
DIVERSE				25 469 640	968 348,76	
NUFU-PRO TOTAL PORTFOLIO UiB				104 046 040	4 227 992	

Source: UiB

Table C1 Students, Master's programmes in global and development-related studies at the Faculties of Social Sciences and Medicine and Dentistry, 2004-2013

	Public Admin.	System Dynam.	System Dynam. (Eur.)	Anthr. of Dev.	Dev. Geogr.	Int. Health	Int. Health (Eur.)	Oral Sc.	Total
2004	37	24	0	11	0	23	0	0	95
2005	42	32	0	8	4	36	0	4	126
2006	26	26	0	19	6	36	6	11	130
2007	30	25	0	9	8	30	5	12	119
2008	24	35	0	19	10	24	0	7	119
2009	23	39	0	6	12	32	0	5	117
2010	21	39	24	21	12	30	0	10	157
2011	23	39	20	16	11	33	6	9	157
2012	17	32	20	21	12	25	2	9	138
2013	18	41	24	19	16	25	2	6	151
Total	261	332	88	149	91	294	21	73	1309

Source: UiB

Table C2 Graduates, Master's programmes in global and development-related studies at the Faculties of Social Sciences and Medicine and Dentistry, 2004-2013

	Public Admin.	System Dynam.	System Dynam. (Eur)	Anthrop. of Dev.	Dev. Geogr.	Int. Health	Int. Health (Eur)	Oral Sc.	Total
2004	9	10	0	0	0	10	0	0	29
2005	12	2	0	0	0	8	0	0	22
2006	8	6	0	4	0	13	0	0	31
2007	8	8	0	6	2	14	0	1	39
2008	12	11	0	4	6	11	0	1	45
2009	10	4	0	4	2	8	4	0	32
2010	10	18	0	10	7	7	0	0	52
2011	10	15	0	0	5	8	1	1	40
2012	15	11	19	15	6	13	0	4	83
2013	6	7	22	0	5	7	2		49
Total	100	92	41	43	33	99	7	7	422

Source: UiB

Table C3 Credits, Master's programmes in global and development-related studies at the Faculties of Social Sciences and Medicine and Dentistry, 2004-2013

	Public Admin.	System Dynam.	System Dynam. (Eur)	Anthr. of Dev.	Dev. Geogr.	Int. Health	Int. Health (Eur)	Oral Sc.	Total
2004	1002	1500	0	390	72	1224	0	0	4188
2005	1320	888	0	522	102	1590	0	156	4578
2006	1044	990	0	690	306	1932	246	288	5496
2007	984	1350	0	840	240	1914	216	288	5832
2008	1218	1662	0	636	588	1314	276	246	5940
2009	1068	1368	0	810	444	1506	156	258	5610
2010	1200	2028	672	990	792	1290	138	270	7380
2011	1110	1752	642	1008	582	1374	246	360	7074
2012	1338	1578	840	1020	762	1716	72	498	7824
2013	858	1386	870	1140	708	912	120	276	6270
Total	11142	14502	3024	8046	4596	14772	1470	2640	60192

Source: UiB

Table D1 Bilateral agreements

Region	Country	University/ Insitution	Year signed	Type of Cooperation	Agreement level	Disciplines
Africa	Botswana	Ministry of Health and Minsitry of Education, Botswana	2003	Education of medical students	Faculty of Medicine and Dentistry	Medicine
Africa	Botswana	University of Botswana, Faculty of Social Sciences	2007	General	Faculty of Social Sciences	Socialanthropology
Africa	Cameroun	University of Maroua	2010	Research and doctoral training	Institutional	Pedagogics,
Africa	Cameroun	University of Yaoundé	2004	Research	Faculty of Psychology	Pedagogics,
Africa	Cameroun	University of Yaoundé	2006	Research, Doctoral Training	Faculty of Humanities	Linguistics, Languages
Africa	Egypt	The American University in Cairo	2004	Student exchange	Institutional	Middle Eastern Studies, Arabic
Africa	Ethiopia	Armauer Hansen Research Institute (AHR)	2013	Research and Graduate Education	Institutional	Health, Medicine, Dentistry
Africa	Ethiopia	Addis Ababa University	2009	General	Institutional	All
Africa	Ethiopia	Addis Ababa University Faculty of Medicine	2004	Research,	Faculty of Medicine and Dentistry	Medicine
Africa	Ethiopia	Mekelle University	2012	Graduate education	Faculty of Psychology	Gender and Development
Africa	Ethiopia	University of Gondar	2010	Research, Graduate education, Staff and student mobility	Institutional	Medicine
Africa	Egypt	University of Cairo	2005	Research, Recruitment of students to scholarship programs	Institutional	System Dynamics
Africa	Gambia	University of the Gambia	2006	General	Institutional	Physics, Environmental Studies
Africa	Ghana	University of Ghana	2005	Research and Graduate Education	Institutional	All
Africa	Ghana	University of Ghana	2008	Student Exchange	Institutional	All
Africa	Ghana	Northern Empowerment Association	2009	Graduate Student Exchange	Department	Health Promotion
Africa	Kenya	Kenya Medical Research Institute	2012	Research and Graduate Education	Department	International Health
Africa	Kenya	University of Nairobi	2007	Research and Graduate Education	Institutional	Psychology and Health Promotion
Africa	Malawi	University of Malawi	2007	Research and Graduate Education	Institutional	All
Africa	Namibia	Benguela Current Commission	2010	Research	Institutional	Marine Biology, Fisheries, Oceanography
Africa	Rwanda	National University of Rwanda	2008	Graduate education	Institutional	Archaeology
Africa	Senegal	Université Cheikh Anta Diop, Faculte des Lettres et Sciences Humaines	2006	Research and Graduate Education	Faculty of Social Sciences	Administration and Organizaton
Africa	South Africa	University of Cape Town	2002	General	Institutional	All
Africa	South Africa	University of KwaZulu-Natal	2004	General	Institutional	All
Africa	South Africa	University of Limpopo	2007	Research and Graduate Education	Institutional	International Health, Health promotion
Africa	South Africa	University of Stellenbosch	2005	General	Institutional	All
Africa	South Africa	University of the Western Cape	2008	General	Institutional	All
Africa	South Africa	University of the Witwatersrand	2011	Research, Student and Staff Exchange	Institutional	Archaeology
Africa	South Africa	University Of Pretoria	2006	General	Faculty of Psychology	Department of Education and Health
Africa	South Africa	University of Zululand	2004	Student exchange, Research	Institutional	Culture Studies
Africa	Sudan	University of Science and Technology	2008	Research and Graduate Education	Institutional	All
Africa	Sudan	University of Science and Technology	2005	Research and Graduate Education	Faculty of Medicine and Dentistry	Dentistry

Region	Country	University/ Insitution	Year signed	Type of Cooperation	Agreement level	Disciplines
Africa	Sudan	Ahfad University of Women	2008	Research and Graduate Education	Institutional	All
Africa	Sudan	Ahfad University of Women	2012	Research, Master and Doctoral education	Department	International Health
Africa	Sudan	University of Juba	2008	Research and Graduate Education	Institutional	All
Africa	Sudan	University of Khartoum	2013	Research, Master and PhD education	Institutional	All
Africa	Tanzania	Ifakara Health Institute	2013	Research, Master and PhD education	Institutional	Global Public Health
Africa	Tanzania	Muhimbili University of Health and Allied Sciences	2009	Research, Graduate Education, Student and Staff Exchange	Institutional	Public health, Medicine, Dentistry
Africa	Tanzania	Tanzania Fisheries Research Institute	2008	Research, Graduate Education Student and Staff Exchange	Department	Biology
Africa	Tanzania	Mzumbe University	2006	Research and Graduate Education	Department	Administration and Organizaton
Africa	Togo	The University of Lomé	2013	Research, Postgraduate Education	Department	International Health
Africa	Uganda	Makerere University, Kampala	1999	General	Institutional	All
Africa	Zambia	University of Zambia, School of Medicine	2002	Research and Graduate Education	Faculty of Medicine and Dentistry	Public health
Africa	Zimbabwe	University of Zimbabwe	2007	Graduate Education	Department	Administration and Organizaton
Asia	Bangladesh	University of Dhaka	2011	General	Institutional	Social Science, Info and Media, Admin and Org
Asia	Bangladesh	North South University, General and Continuing Education Department	2007	Research, Postgraduate Education	Department	Administration and Organizaton
Asia	Bangladesh	University of Chittagong	2007	Research, Graduate Education	Department	Administration and Organizaton
Asia	Bangladesh	BRAC University Dhaka	2008	Research, Graduate Education	Department	Administration and Organizaton
Asia	Bangladesh	University of Rajshahi	2007	Research, Graduate Education	Department	Administration and Organizaton
Asia	Cambodia	Royal University of Phnom Penh	2012	Research, Graduate Education, Teaching and Student Exchange	MNFAK	Mathematics and Natural Sciences
Asia	China	Tibet University, Lhasa	2011	Research and Graduate Education	Institutional	All
Asia	China	Institute of Tibetan Plateau Atmosphere and Environment Sciences	2012	Master and PhD education, Research	Institutional	Natural Sciences
Asia	India	University of Kerala	2013	Research, Graduate education and Academic Staff Exchange	Department	Literature, Linguistics and Aesthetics (LLE)
Asia	India	Christian Medical College Vellore	2009	Research, graduate education and student exchange	Institutional	Faculty of Medicine and Dentistry
Asia	India	Kumaun University Nainital, Uttarakhand	2009	Research and Graduate Education	Institutional	Geography
Asia	India	St Johns Research Institute, Bangalore	2007	Research and Graduate Exchange	Centre	International Health
Asia	Nepal	Tribhuvan University,	2007	Research	Institutional	All
Asia	Nepal	Tribhuvan University	2004	Research and Graduate Exchange	Department	Administration and Organizaton
Asia	Nepal	Tribhuvan University	-	-	-	Geography
Asia	Pakistan	Association for Social Development	2010	Research and Graduate Exchange	Department	Centre for International Health
Asia	Pakistan	Institute of Management Studies, University of Peshawar	2007	Research and Graduate Education	Department	Administration and Organizaton
Asia	Palestinian Areas	Birzeit University	2008	Research and Graduate Education	Institutional	All
Asia	Sri Lanka	University of Peradeniya	2008	Graduate education	Institutional	Administration and Organizaton
Asia	Sri Lanka	Department of Economics, University of Ruhuna	2007	Graduate education	Department	Administration and Organizaton

Region	Country	University/ Insitution	Year signed	Type of Cooperation	Agreement level	Disciplines
Asia	Sri Lanka	University of Ruhuna - Dep of Zoology	2011	Research	Department	Marine Biology, Fisheries, Zoology
Asia	Thailand	Chulabhorn Research Institute	2013	Research, Graduate Student and Academic Staff Exchange	Institutional	All
Asia	Vietnam	Nha Trang University	2011	Research, Graduate Education, Student and Academic Staff Exchange	MNFAK	Marine Biology, Fisheries, Aquaculture
Asia	Vietnam	Research Institute for Aquaculture - RIA 3	2011	Research, Graduate Education, Student and Academic Staff Exchange	MNFAK	Marine Biology, Fisheries, Aquaculture
Asia	Vietnam	Can Tho University	2004	Research	MNFAK	Biology
Europe	Georgia	Faculty of Public Health, Batumi Shota Rustaveli State University	2009	Research and Graduate Education	PSYFAK	International health and health promotion
Europe	Georgia	Faculty of Medicine, Tbilisi State University	2009	Research and Graduate Education	PSYFAK	International health and health promotion
Europe	Georgia	Faculty of Public Health, Tbilisi State Medical University	2009	Research and Graduate Education	PSYFAK	International health and health promotion
Europe	Georgia	Georgian Health Promotion and Education Foundation	2009	Research and Graduate Education	PSYFAK	International health and health promotion
Europe	Georgia	Georgia International Health Development Agency	2009	Research and Graduate Education	PSYFAK	International health and health promotion
Europe	Georgia	Akaki Tsereteli State University	2009	Research and Graduate Education	PSYFAK	International health and health promotion
Europe	Georgia	Ivane Javakishvili Tblisi State University	2006	Research and Graduate Education	Institutional	Humanities and Social Sciences
Europe	Romania	University of Medicine and Pharmacy Carol Davila of Bucharest, Faculty of Stomology	2005	Research and Graduate Education	Faculty of Medicine and Dentistry	Dentistry
Europe	Russia	Lomonosov Moscow State University	2014	General	Institutional	All
Europe	Ukraine	Taras Shevchenko National University of Kiev	2012	Graduate Education	Department	Philosophy
Europe	Ukraine	National University of Kyiv Mohyla Academy	2008	Research and Graduate Education	Faculty of Social Sciences	System Dynamics

Source: UiB

Appendix 4

Global and development-related research at the University of Bergen 2004-2013

A bibliometric study

Dag W. Aksnes

NIFU

Working paper, September 2014

Introduction

This working paper presents a bibliometric analysis of global and development-related research at the University of Bergen (UiB) and is a background report for the ongoing evaluation.

Publication and citation data have increasingly been applied as performance indicators in the context of science policy and research evaluation. The basis for the use of bibliometric indicators is that new knowledge – the principal objective of basic and applied research – is disseminated to the research community through publications. Publications can thereby be used as indirect measures of knowledge production. Data on how much the publications have been referred to or cited in the subsequent scientific literature can in turn be regarded as an indirect measure of the scientific impact of the research.

Within the scope of the evaluation, a comprehensive bibliometric analysis has, however, not been carried out. The main purpose of the analysis has been to provide a macro view on the development of global and development-related research at UiB during the period 2004–2013. Main issues analysed include: publication output, discipline profile, institutional contribution, citation rates, and international collaboration.

It should be noted that the bibliometric analysis is carried out as a separate study, independent of the other parts of the evaluation. This means that there are some differences in the way global and development-related research have been delimited. For example, the natural sciences have not been included in the bibliometric analysis (cf. text box below). Moreover, UiB Global is poorly covered by the analysis, due to missing data registered in CRISStin. These factors are important to take into consideration when interpreting the results.

Data & Methods

The study is based on two main data sources. One is the publicly accessible database CRISStin which is a joint system for registration of scientific publications applied by Norwegian higher education institutions. The institutions' budget allocations are partially based on their scientific and scholarly publishing, as documented in CRISStin. The database includes all types of scientific publications (not only journal articles, but also monographs and book chapters), in all fields of research. Bibliographic data are collected through a common documentation system, resulting in complete, verifiable and structured data for use in bibliometric analysis. Publication activity is reported by the institutions as standard bibliographic references, which are analyzable by publication channel and type of publication. A dynamic authority record, covering 25,000 controlled scientific and scholarly publication channels ensures that

references from non-scientific publications are not entered into the system. Publication data from professional bibliographic data sources (e.g. the Web of Science) are imported to the system, to facilitate the registration of publications by the employees.

The other data source is Web of Science by Thomson Reuters (formerly known as Institute for Scientific Information (ISI)), the producer of the most important database for bibliometric purposes. Different database products are applied in the study (containing e.g. data on citation counts, co-authors etc.)

Data from Web of Science have been used for analysing citation rates and international collaboration. It is important to note that only part of the global and development-related research output is indexed in the database. These analyses are, therefore, based on a smaller dataset than the other part of the study. The coverage of Web of Science varies between disciplines. The best coverage is achieved for physics, chemistry, biomedicine and clinical medicine. In biology and technology, coverage is also relatively high. However, the coverage in the social sciences and humanities is less good. This is partly because Thomson Reuters does not index all the relevant journals and partly because publication patterns differ between disciplines; in some disciplines, less centralised research communication, outside of international journals, plays a more important role, via national magazines, in books, etc. In consequence, the part of global and development-related research relating to the humanities and social sciences is less covered.

In the study we have used number of publications and number of publication points as indicators. The latter indicator is a weighted expression of the publication volume where number of co-authors, publication type and level are used as parameters in the calculations.

As citation indicator, we have applied the relative citation index which is an indicator showing whether the publications have been cited above or below the world average (=100). Here the citation count of each paper is matched to the mean citation rate per publication of the particular fields.

The definition of global and development-related research is open to different interpretations, and it is likely that the interpretation used in this report will differ from the one applied by some of the units. This may be seen as both a strength and a limitation. The strength is that the field is delineated in a coherent and uniformed manner across faculties and departments. The limitation is that the analysis may not fully cover the research which the research units themselves consider as global and development-related research.

The definition used by the university management in the evaluation process is formulated in the following way: "The focus area embodies important global and local challenges for poor countries and the basic needs of humans, opportunities and processes for development related to these challenges, and human rights, resource issues and sustainable development."

The definition can be operationalised in different ways. The information on which UiB-departments that have reported to carry out global and development-related research suggest that the definition has been interpreted very broadly. Only four UiB-departments/centers were included in the Norwegian Research Council's evaluation of development research (2007), all from the Faculty of Social Science. In this evaluation, however, a large number of units across almost all faculties have reported carrying out such research. Considering this fact, we have also applied a rather broad definition in the bibliometric analysis. One exception, however, is that research within the natural sciences has been excluded – despite the fact that several departments from The Faculty for Mathematics and Natural Sciences have reported to carry out such research. We do not consider it as reasonable to include natural scientific research within the concept, even though the research may have been carried out in developing countries or involve collaboration with research groups in developing countries. The exception is studies dealing with natural geography, for example how landscape and vegetation affect the human population and its use of the resources.

In contrast to the evaluation of development research by the Research council, we have included studies within medicine and health. This is a large area with research spanning from biomedicine to public health.

Research explicitly dealing with developing countries has in most cases been included, regardless of research topics (but excluding natural sciences). For example, a study of malaria in Tanzania is included or a study of Buddhism in India. This means that many topics not specifically dealing with globalisation, development or poverty reduction is included. No doubt, this decision may be controversial. However, our operationalisation seems to be in accordance with how the concept has been interpreted at department levels at UiB. The alternative of applying a strict definition would imply that the volume of the research would be significantly smaller and only a few departments at UiB would qualify.

In order to identify publications that should be assigned to global and development-related research, two principles have been used. First, all publications from the journals that entirely or mainly cover global and development-related research have been included (e.g. the journals *Journal of Development Economics* and *Journal of Development Studies*). Second, we have used the title of the publications as information. In this process, we have scanned the entire publication output of UiB and publications with a title suggesting a global and development-related research content have been included. Clearly, there are cases where this have been difficult or impossible. Either because of very esoteric titles where field experts would be required to assess the question, or because some publications may have a global and development-related research content not indicated by the title. The latter issues represent a source of error in the study and possibly, the global and development-related research publication volume is somewhat underestimated. However, as the intention has

been to provide a macro view of the research output, and not detailed analyses of the contributions of individual departments, we regard the source of error as acceptable.

All publications were classified according to scientific areas, using the following broad categories: Medicine & health (covering research within human life sciences spanning from molecular biology to public health and psychology), social sciences and humanities.

It should be emphasised that the report is independent of the other parts of the evaluation.

Natural scientific global and development-related research

The bibliometric analysis is a separate survey, completely independent of the work done by the Panel. The publication analysis was conducted prior to work of the Panel and the delineation of the field was not discussed. In the bibliometric analysis, global and development-related research was interpreted as natural sciences would not fall into the definition underlying the evaluation. Therefore, the natural sciences were not included. Nevertheless, several departments at the Faculty of Mathematics and Natural Sciences have reported carrying out global and development-related research.

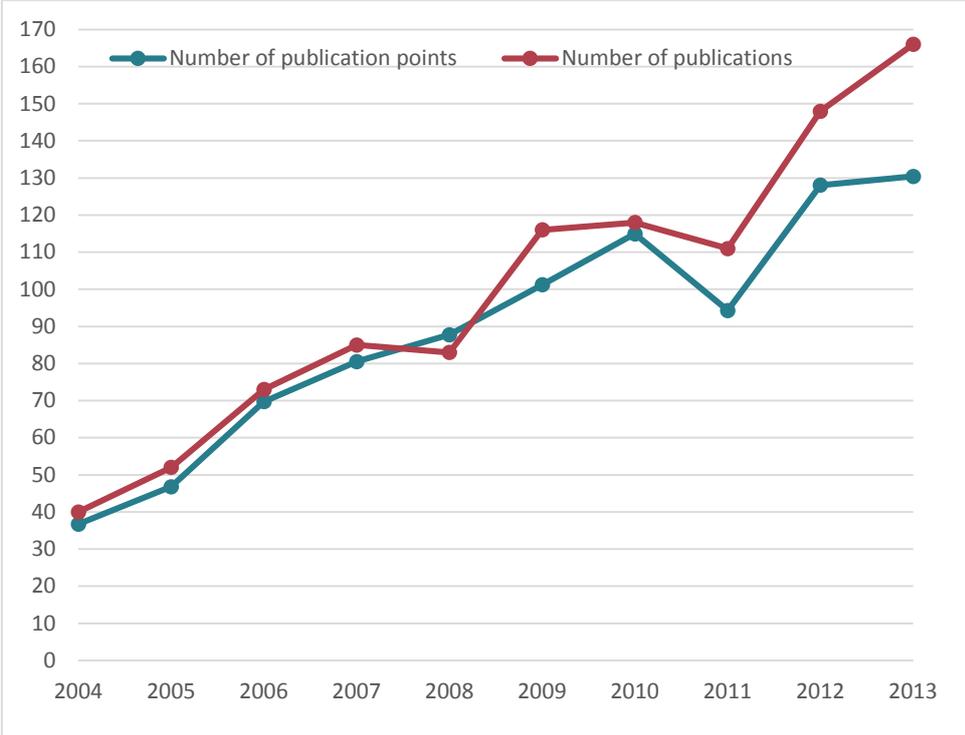
In order to assess the publication volume of the natural scientific research, which has not been included in the analysis, a minor additional survey was carried out. Based on the publication lists submitted for the evaluation, we identified central scientific and geographical terms and used these as terms in a literature search. This analysis identified approximately 210 articles published during the period 2004-2013. This means that the total publication output presented in the report would have increased by one fifth if the natural scientific research had been included. The Department of Biology accounts for the largest share of these publications, but we also find a considerable number of articles from the Department of Earth Science. There are several departments with a smaller amount of articles, such as Geophysical Institute, Bjerknes Centre for Climate Research, Department of Chemistry and Department of Physics and Technology.

The units carrying out global and development-related research at the university have not been involved in the process or verified the data.

Results

The results shows that in total almost 1000 research publications within the field have been published by UiB employees during the 10 year period 2004-2013. The number has increased significantly, from less than 100 publications annually during the first years to approximately 170 publications in 2013, cf. Figure 1. In terms of publication points, the increase is also strong (lowest in 2004 with 37 points and highest in 2013 with 130 points).

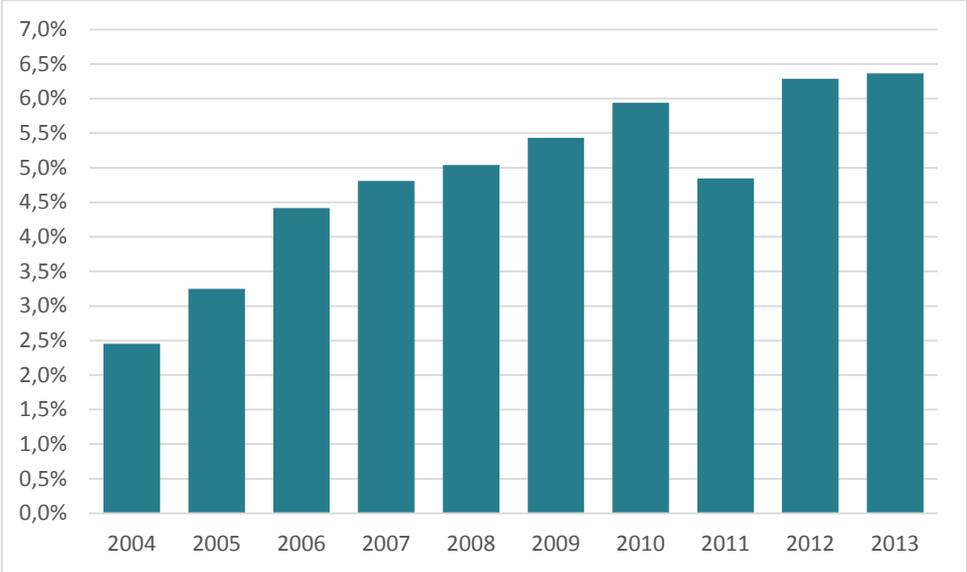
Figure 1. Number of publications and publication points, global and development-related research, UiB, 2004-2013



*) Publications within the natural sciences have not been included in the study.

Global and development-related research accounts for 6.4 per cent of UiB’s total publication output in 2013 (based on publication points). In other words, the analysis documents that UiB has a distinct profile towards global and development-related research. During the period 2004-2013 the annual proportion has increased significantly (from 2.5 % in 2004, Figure 2). This means that the relative growth in publication numbers in global and development-related research has been much stronger than in other areas.

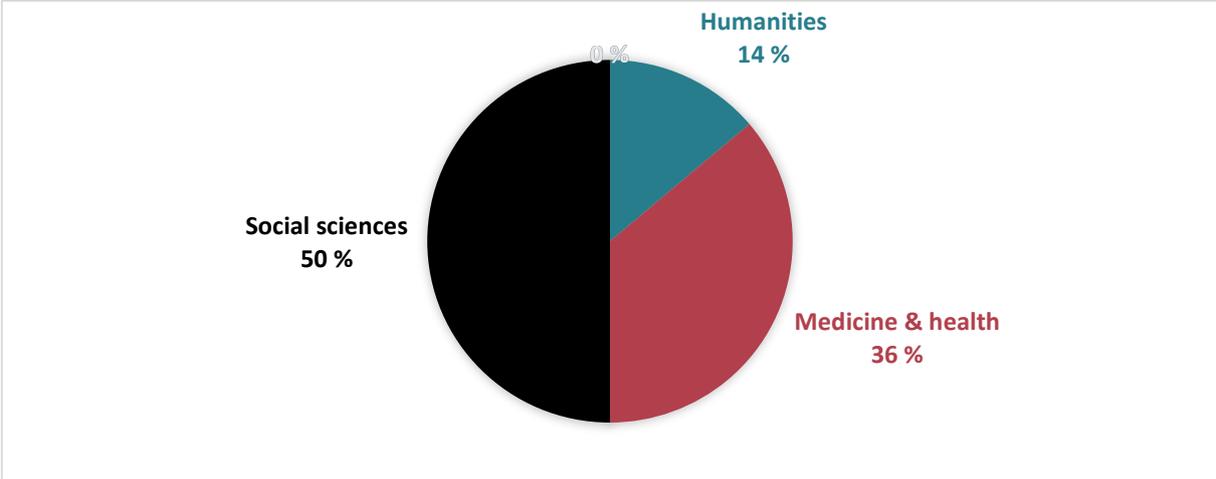
Figure 2. Global and development-related research' share of of UiB's total publication output,* 2004-2013



*) Based on publication points. Publications within the natural sciences have not been included in the study.

The social sciences account for half of the global and development-related research output (Figure 3, total for 2004-13). Medicine and health has a proportion of 36 per cent while the figure is 14 per cent for the humanities.

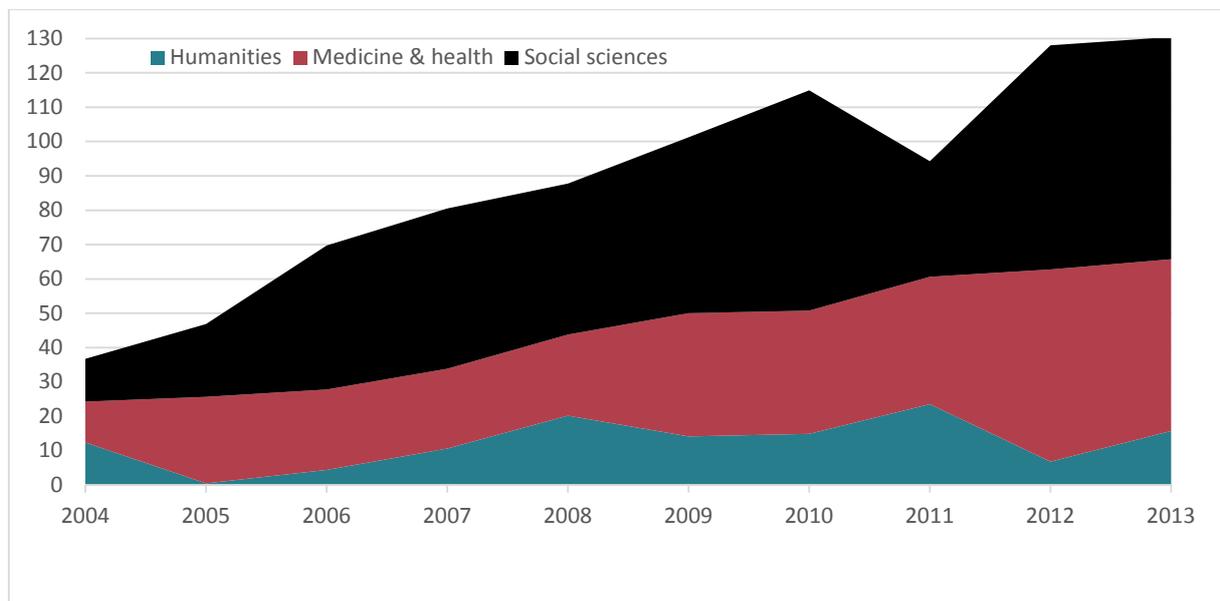
Figure 3. The scientific profile of global and development-related research, proportion of publications* by discipline, total 2004-13.



*) Based on publication points. Publications within the natural sciences have not been included in the study.

Figure 4 shows how the publication volume has developed during the period 2004-2013 for medicine & health, the social sciences and humanities. There are some annual variations in the volume. Overall the research output has increased significantly for medicine & health and the social sciences, while the humanities show a less distinct pattern with strong annual fluctuations.

Figure 4. Number of publication points by field, global and development-related research, UiB, 2004-2013



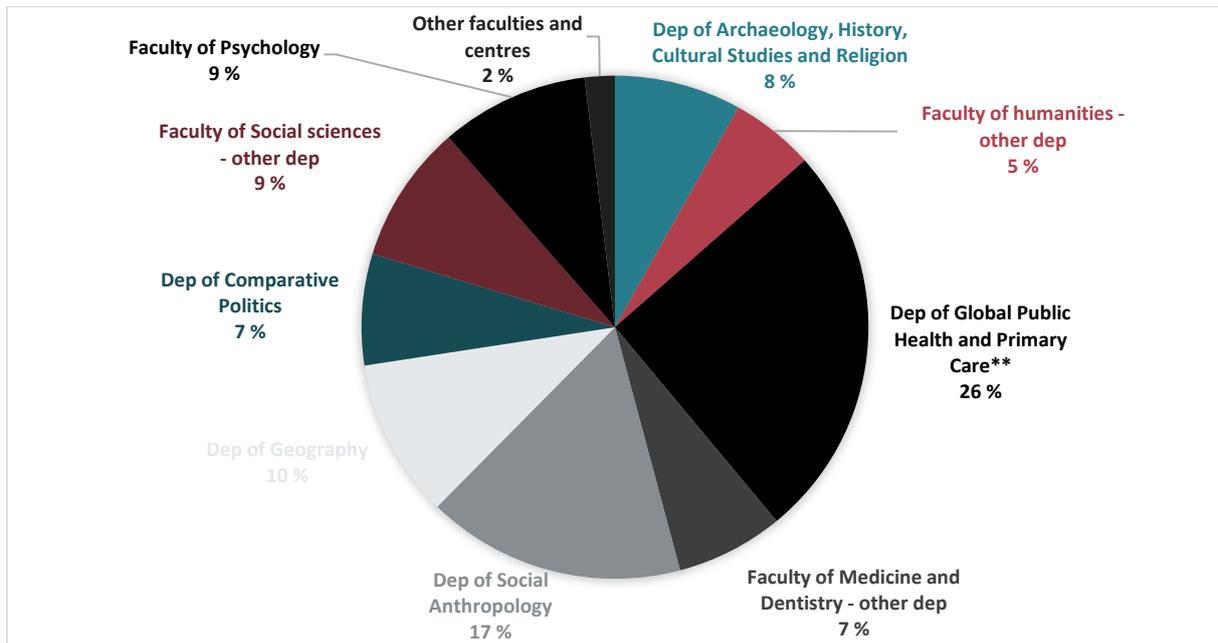
*) Publications within the natural sciences have not been included in the study.

The present report describes the global and development-related research by quantitative indicators. Such an approach provides little direct information on the actual content of the research carried out at UiB. This has to be analysed by other methods. Some indications of the content of the research can be obtained by analysing the title of the publications quantitatively based on word frequencies of title words.

The results for the global and development-related research publications from 2009-2013 are presented as clouds of words in Figures 5 and 6 (separate figures for medicine & health and social sciences). In the figures the size of a word is proportional to the number of times the word appears in the titles (common words like *and*, *of*, *a*, *the*, etc. have been deleted).

Figure 5 shows the word cloud for the social scientific publications. The figure suggests that research relating to Africa is most frequent followed by Asia, while there is less research relating to Latin-America.

Figure 7. Contribution to global and development-related research by departments and faculties. Proportion of publications 2009-13.*



*) Based on publication points. Only the largest departments in terms of publication output are shown separately in the figure. Publications within the natural sciences have not been included in the study.

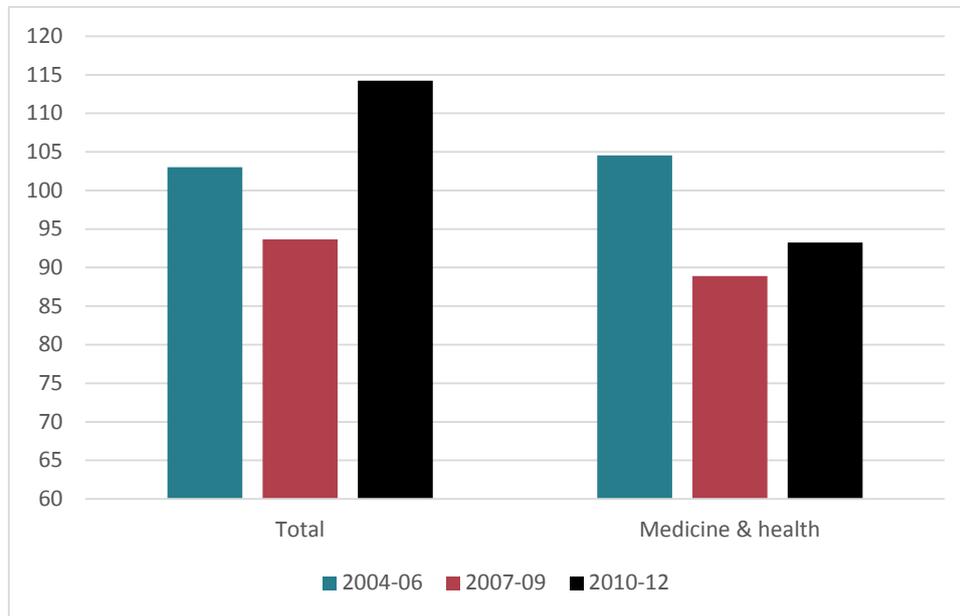
***) Including publications from the former departments: the Centre for International Health and Department of Public Health and Primary Health Care.

We have calculated citation indicators for the publications from three three-years periods: 2004-06, 2007-09 and 2010-12. In figure 8, the relative citation index is shown for global and development-related research in total and for medicine & health. Due to the limited coverage of the database, citation indicators have not been calculated separately for the social sciences and humanities.

Overall, the global and development-related research publications have been cited somewhat higher than the field normalised world-average in the most recent period. The publications from the period 2010-12 have a citation index of 114, meaning that they have been cited 14 per cent more than the world average. In comparison, the citation index for Norwegian science in total is 130 (2009-12 average) and for UiB in total 126 (2010-11 average). Thus, the research within the field is not particularly highly cited, and in the preceding period (2007-09) the citation index is below the world average (94).

Looking at the medicine & health publication only, the citation index is even lower, and in 2010-12 slightly below world- average (94). It should be emphasised that a citation analysis cannot substitute for an evaluation carried out by peers. The publications needs to be assessed by peers in order to assess their quality. Possibly, the low citation rate of the medical publications may be due to the fact that part of the research is outside mainstream Western medicine and/or is published in peripheral journals with little distribution (e.g *Ethiopian Journal of Health Development*).

Figure 8. Relative citation index in global and development-related research 2004-2012.* Total and medicine & health.

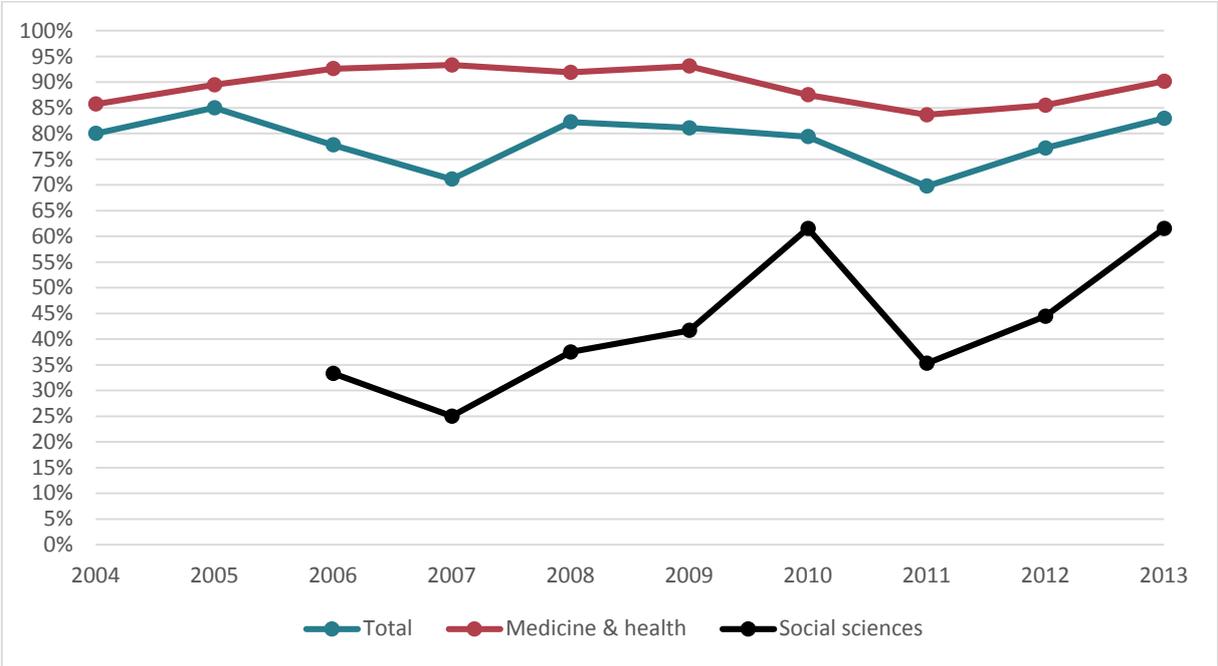


*) Based on the publications from the period 2004-2012 and accumulated citations to these publications through 2013. World-average = 100. Only articles indexed in Web of Science are included in the calculations. Publications within the natural sciences have not been included in the study.

Co-authorship is a commonly used indicator of research collaboration. When researchers from different institutions together author a publication, this indicates that the research has involved collaboration. On this basis co-authorship can be used as indicator of national and international collaboration. Increasing collaboration in publications is an international phenomenon and is one of the most important changes in publication behaviour among scientists during the last decades, particularly within medicine and the natural sciences.

The collaboration profile of UiB's global and development-related research has been studied based on data on international co-authorship (i.e. publications with author addresses both from UiB and other institutions). Of all the global and development-related research publications (2004-2013), 78 per cent had co-authors from other countries. Thus, the extent of international collaboration is wide, apparently involving the large majority of the global and development-related research. The proportion of international collaboration has varied from 70 per cent to 85 per cent during the 10-year period (Figure 9). In 2013 the proportion was 83 per cent per cent. The proportion has been significantly higher in medicine & health than in the social sciences (the humanities is not shown due to a small number of indexed publications). In medicine & health, 90 per cent of the publication had foreign co-authors in 2013, compared with 62 per cent in the social sciences. It is, however, a general phenomenon that the incidence of international collaboration measured through co-authorship is higher in medicine than in the social sciences.

Figure 9. Proportion of articles with international collaboration,* global and development-related research, 2004-2013. Total, medicine & health and social sciences.



*) Only articles indexed in Web of Science are included in the calculations. Publications within the natural sciences have not been included in the study.

Which countries are the most important collaboration countries for UiB? To answer this, the distribution of co-authorship by country has been studied. Table 1 shows the frequencies of co-authorship for the nations that comprise UiB’s main collaboration partners from 2009 to 2013 in global and development-related research, medicine & health and social sciences, respectively. In medicine & health, almost one quarter of the publications had co-authors from Tanzania, followed by South Africa and Uganda with 14 and 12 per cent, respectively. These figures clearly illustrates that a significant part of the UiB-research is carried out in close collaboration with colleges from development countries.

In the social sciences, the figures are significantly lower. With the exception of the USA, which is the largest collaborating country, there are only a few publications included from each country.

Table 1. Collaboration by country 2009–2013. Number and proportion of the article production with co-authors from the respective countries.* Global and development-related research, selected fields (medicine & health and social sciences*)

Medicine & health			Social sciences		
Country	No articles	Proportion	Country	No articles	Proportion
Tanzania	70	23%	USA	12	16%
South Africa	43	14%	South Africa	4	5%
Uganda	36	12%	Nepal	3	4%
USA	31	10%	Chile	3	4%
Ethiopia	28	9%	China	3	4%
UK	27	9%	UK	3	4%
Sweden	21	7%			
Denmark	18	6%			
Zambia	18	6%			
India	17	6%			
China	10	3%			
France	9	3%			
Kenya	9	3%			

*) Only articles indexed in Web of Science are included in the calculations. Publications within the natural sciences have not been included in the study.

**) Only countries with more than 8 and 2 collaborative articles, respectively, are shown in the table.

