



Pathways to global impact

Tracing the impacts of development research funded by
the Research Council of Norway

Espen Solberg, Silje M. Tellmann, Siri Aanstad,
Dag W. Aksnes, Inge Ramberg and Pål Børing



Report 2017:13

NIFU

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Published by Nordic Institute for Studies in Innovation, Research and Education (NIFU)
Address P.O. Box 2815 Tøyen, NO-0608 Oslo. Office address: Økernveien 9, NO-0653 Oslo.

Project No. 12820699

Customer The Research Council of Norway
Address P.O Box 564 N-1327 Lysaker, Norway
Visiting address: Drammensveien 288, 0283 Oslo

Photo Shutterstock

ISBN 978-82-327-0277-0
ISSN 1892-2597 (online)



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www.nifu.no

Preface

This report presents the findings of a project commissioned by the Research Council of Norway (RCN). The main purpose of the project has been to capture and analyze the results and impacts of development research in Norway. Special attention has been devoted to RCN's targeted programmes in this area during the last 20 years.

The study has required a combination of different methodologies and sources, including R&D statistics, bibliometrics, register-based career tracking, interviews and studies of impact case studies. The study is therefore both an analysis of development research as such and a contribution to future impact studies.

We would like to thank the Research Council of Norway for initiating and financing the project and for their assistance and flexibility throughout the study. We are also grateful to the Ministry of foreign Affairs and NORAD for their participation in a workshop and for valuable assistance in setting up interview appointments. Finally, we are indebted to all informants who were willing to share their views and experience through interviews with the research team.

The project team has consisted of the following NIFU-researchers (with their specific chapter contributions in brackets): Dag W. Aksnes (4), Pål Børing (3), Siri Aanstad (1,5,7), Inge Ramberg (6) and Silje M. Tellmann (5,7,8). Espen Solberg has been the project leader and had a special responsibility for chapters 1, 2, 8 and 9.

Oslo, June 2017

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Summary

Few research topics are more directly related to global challenges than development research. As the UN Sustainable Development Goals have committed the global community to a universal effort in addressing these challenges, understanding the impacts of development research seems both relevant and timely. This report presents a mixed method analysis of the use and impacts of Norwegian development research during the last 20 years. The study provides an overview of all national research efforts in the area, but with special attention to the contribution of targeted research projects financed by the Research Council of Norway.

A general impression is that Norwegian development research is widely used and applied in various settings, both in national contexts and not least internationally. However, many users seem unable to absorb and exploit the variety of research performed in the area. Better mechanisms for interaction between users and researchers are needed, both outside and within the funding arenas.

Furthermore, we find clear evidence that RCN's targeted programmes have made substantial contributions to building research capacity as well as societal impact in the field. On the other hand, many users seem to have little insight and engagement in the programmes. Future programmes could therefore allow for broader thematic orientations combined with better mechanisms for engaging core users and society during the programme period.

Development research - a scattered and specialized field

Development research in Norway seems to be both scattered and specialized: On the hand, the field involves more than 100 research institutes and units, often appearing as minor sub topics integrated in research units with other main thematic orientations. On the other hand, the few research institutes and higher education units that are specialized in the field, account for more than 2/3 of all reported expenditure to development research.

In terms of academic profile, social science stands out as the most important field, accounting for nearly two thirds of reported development research in the higher education sector and 80 per cent in the institute sector. The stronghold in social science is confirmed by other indicators, although the support from RCN seems to have benefitted researchers from a broader array of disciplines, including natural sciences, technology and medicine and health.

Variation in career patterns

Through register based career tracking we find that the large majority of development researchers with support from RCN have pursued a research career in the Norwegian research system. Their careers are thus in line with the objectives of increasing research capacity in this area. Among those with alternative careers, we find a large group in positions at universities or research institutes abroad, thus

illustrating the strong international dimension in this field of research. Furthermore, careers in policy making, public administration and scientific consulting seems rather common, while we find few researchers employed in national non-governmental aid organisations (NGOs). Another general finding is that experienced researchers in the field tend to move towards academic careers in the higher education sector. This may raise a challenge as many core users seem more inclined to interact with applied research institutes.

A substantial scientific production

Our analysis of scientific publication data shows a particularly strong growth in Norwegian researchers' collaboration with developing countries during the last twenty-year period. We also find that RCN's development research programmes have made substantial contributions to this development.

When we look at the scientific production of PhD-students and post docs who have received grants from RCN's development research programmes, we observe that the proportion of "non-Western" co-authored articles is much higher than for Norwegian research in general. This indicates that the programmes in question have been important in terms of building up long-term cooperative relationships with researchers in the Global South.

For the same set of articles, the citation rate shows a slightly increasing trend during the period 1996 to 2014. Overall, the articles in development research that can be traced to RCN-funding have been cited slightly below or in line with the average for Norwegian research in the same period, which again is well above world average. Hence, despite the fact that many of the programmes in question have an applied and policy-oriented focus, we find few indications of lower scientific impact.

Development research as input to policy

Our interviews with various users in policy and public administration shows that development researchers are frequently used as experts and advisers by politicians and public officials. On the other hand, their scientific articles and reports are less mentioned as a direct source for decisions and policy processes. This pattern appears both from the qualitative interviews with users and from the analysis of references in policy documents. The expert role is, however, not exclusively informal as many researchers also appear as experts in formal public committees and advisory boards.

Another general conclusion is that research in this area is mainly linked to evaluations, overviews and insight in topics that emerge on the policy agenda. We find fewer references to more strategic use of research for shaping future strategies and priorities in the area. In other words, we observe an emphasis on research for "policy readiness" instead of research as a "strategic and corrective factor".

Limited interaction with national NGOs

In our interviews with informants from ten national non-governmental organizations (NGOs) in the field, we find some but very few examples of active and strategic use of research as a basis for development aid activities. Furthermore, hardly any of the NGO-informants seem to be familiar with RCN's programmes in this area.

At the same time, our informants express a strong willingness to make better use of research as a basis for their activities. Our NGO informants also stress the importance of maintaining a strong national research capacity in this area, not only for their own future use, but just as much for the role development researchers play in the public debate and policy making in this area. Hence, although NGOs seem to lack the absorptive capacity as organisations, there seems to be a clear need and potential for increased interaction between national NGOs and national researchers in the field of development research.

Development research as a basis for development studies

Interviews with key informants in higher education institutions show that RCN-programmes for development research have been important also for higher education within development studies;

indirectly, by building and maintaining academic communities and thus teaching capacity; and directly, by funding research that has been used actively in teaching and curriculum development.

Our informants express some concerns about the current and future situation. Some argue that RCN-funded development research is too “impact-oriented” to give students a critical intake to existing policy and practices. Others worry that cuts in government funding for the Research Council programmes risk to weaken the educational provisions within the field.

In general, there seems to be conflicting interests between the claims from policy makers, civil servants and NGOs for more relevant research and higher education institutions’ concerns of maintaining long term and critical research as a foundation for the education of future candidates from development studies.

Pathways to impact

By analyzing a set of impact cases submitted to recent and ongoing evaluations of Norwegian research, we have gained new insight in the variety of patterns and pathways to societal impact in this field.

In general, development research seems well represented among the impact cases submitted from institutions and research groups within humanities and especially social science research. The majority of these cases also include references to support from RCN, which is a further indication of concrete societal impacts from the RCN-programmes subject to this study.

Among the social science impact cases related to development issues, *human rights* stands out as the topic that most cases can be related to. Compared with a similar although larger set of British impact cases, we observe that Norwegian cases more frequently highlight impacts related *faith/culture* and *crime/justice*. Most striking is the high frequency of Norwegian impact cases related to *gender issues*, as this aspect seems to have little importance in the British cases.

Finally, we observe that the most frequently reported pathway to impact is through direct influence on international reports, processes and activities related to development issues. Hence, understanding the broader impacts of Norwegian development research requires thorough analysis of international networks, reports and policy processes as well as practical development aid activities.

Norsk sammendrag

Forskning forventes i økende grad å rette seg mot store samfunnsutfordringer. Det er et uttalt mål både i norsk og internasjonal forskningspolitikk. Mange av disse utfordringene er globale og kan ramme spesielt hardt i utviklingsland. FNs tusenårs mål og de nyere bærekraftsmålene har dermed satt en klar agenda både for utviklingspolitikken og forskningspolitikken. I et slikt perspektiv er det interessant å forstå virkningene av utviklingsforskning. Blir slik forskning brukt av hjelpeorganisasjoner og aktører som jobber for land i Sør? Får forskningen betydning for utviklingspolitikken? Hva slags karriereløp har forskerne på feltet?

Dette er blant de spørsmålene som reises i denne rapporten. Her ser vi først på omfang, profil og utviklingstrekk for norsk utviklingsforskning generelt. Deretter ser vi mer spesifikt på resultater og effekter som har kommet ut av Forskningsrådets satsinger på utviklingsforskning gjennom de siste 20 årene. Hovedformålet er å fange opp og følge de lange sporene av den forskningen som har vært finansiert gjennom perioden.

Hovedfunn

Et hovedinntrykk er at norsk utviklingsforskning brukes i en rekke sammenhenger og av ulike brukere, både i Norge og ikke minst internasjonalt. Samtidig ser vi flere tegn til manglende oversikt og kunnskap om relevant forskning. Studien bekrefter således inntrykket fra tidligere evalueringer om at det er behov for bedre arenaer for dialog mellom forskere og brukere, ikke bare utenfor finansieringsarenaene, men også innenfor etablerte programmer og finansieringsordninger.

Vi finner også at Forskningsrådets målrettede programmer på feltet har bidratt til å bygge opp forskningskapasitet og støttet forskning som har gitt klare samfunnseffekter for utviklingsland. Forskningsprogrammenes rolle synes å ha bred støtte, men programmenes profil og aktiviteter er lite kjent, heller ikke blant sentrale aktører på feltet. Framtidige programmer bør kunne åpne for bredere tematisk profil og engasjere flere aktører, både på finansierings- og brukersiden.

Norsk utviklingsforskning er spredt og spesialisert

Ser vi på det store bildet, foregår norsk utviklingsforskning i et stort antall fag og miljøer. I FoU-statistikken er det mer enn 100 institusjoner og enheter som rapporterer at de driver med utviklingsforskning. Men i mange av tilfellene utgjør utviklingsforskning kun en liten del av fagmiljøer hvor andre tematiske områder er hovedfokus.

På den annen side ser vi at en håndfull miljøer som har utviklingsforskning som hovedfokus, står for mer enn to tredeler av all rapportert utviklingsforskning i Norge. Slik sett er feltet også preget av noen spesialiserte aktører.

Blant universiteter og høyskoler (UoH) er Universitetet i Oslo, Universitetet i Bergen og NMBU de største aktørene. De tre står til sammen for omtrent halvparten av all utviklingsforskning i Norge. I instituttsektoren er Christian Michelsens Institutt (CMI), Fredsforskningsinstituttet (PRIO) og Norsk utenrikspolitisk institutt (NUPI) de tre største aktørene, med til sammen ca. 20 prosent av norsk forskning på feltet. Hovedmønsteret fra FoU-statistikken bekreftes i stor grad når vi kartlegger feltet ut fra vitenskapelig publisering.

Kompetanseutvikling og utviklingsforskernes karrierer

Et hovedformål med Forskningsrådets programmer på området har vært å bygge opp norsk forskningskapasitet rundt utviklingsspørsmål, både gjennom aktiviteten i prosjektene og gjennom støtte til doktorgrader og postdoktorer. For å få et bilde på utvikling og bruk av denne kapasiteten har vi gjort en systematisk studie av karrierene til samtlige personer som har vært prosjektledere og/eller mottatt doktorgrads- eller postdoktorstipend fra programmene gjennom hele 20-årsperioden. Til sammen dreier det seg om drøyt 460 personer.

I hovedtrekk finner vi en ganske stor grad av stabilitet i forskernes karrierer. De aller fleste har funnet en karriere innenfor det norske forskningssystemet. Blant de forskerne som finner andre karriereveier, er det vanligst å gå til en utenlandsk forskningsinstitusjon, noe som følger av den internasjonale dimensjonen i slik forskning. Videre finner vi en god del tidligere stipendiater og forskere innenfor offentlig administrasjon og konsulentbransjen i Norge, hvorav flere i sentrale stillinger. Derimot finner vi ganske få tidligere forskere med arbeidssted i frivillige organisasjoner. Det er noe overraskende gitt den tematiske koblingen mellom utviklingsforskning og bistandsarbeid.

Et annet generelt trekk er at erfarne forskere og prosjektledere synes å gå mot karrierer i UoH-sektoren, mens mange sentrale brukere synes å ha et nærmere og mer etablert samarbeidsforhold med anvendte institutter.

Økende vitenskapelig publisering

Selv om utviklingsforskning er et utpreget anvendt forskningsfelt, er akademisk publisering viktig for å spre forskningen og sikre et høyt faglig nivå. Våre analyser av denne publiseringen viser for det første at det har vært sterk vekst i norske forskeres sampublisering med forskere fra land i Sør. Materialet tyder også på at Forskningsrådets programmer har vært viktig i denne utviklingen. For eksempel har forskere som har mottatt støtte fra Forskningsrådets utviklingsprogrammer langt større tilbøyelighet til å samarbeide med forskere fra ikke-vestlige land sammenliknet med mønsteret for norsk forskning totalt.

De samme forskernes artikler er sitert noe under eller omtrent på nivå med snittet for norsk forskning på samme fagfelt, hvilket er godt over verdensgjennomsnittet. Selv om utviklingsforskningen i stor grad er finansiert av handlingsrettede og anvendt orienterte programmer finner vi altså få indikasjoner på at det har hatt negativ betydning for siteringen.

Betydning for utviklingspolitikk og forvaltning

Utviklingsforskning er knyttet til et felt med stor politisk interesse. For å spore forskningens betydning for utviklingspolitikk og forvaltning, har vi for det første sett på forskeres deltakelse i relevante råd og utvalg på feltet. Dernest har vi studert forskningens bruk og innflytelse i sentrale utviklingspolitiske dokumenter. I tillegg har vi intervjuet tidligere politikere med ansvar for utviklingspolitikk samt medarbeidere i Utenriksdepartementet og NORAD.

Vår analyse viser at offentlige utredninger på utviklingsfeltet involverer forskere i noe større grad enn det som er vanlig i slike prosesser. Av 33 forskere som er oppnevnt som medlemmer av offentlige utvalg innenfor utviklingspolitikk, har 12 mottatt støtte fra Forskningsrådets programmer på feltet. Det er stor variasjon når det gjelder referanser til forskning i selve utredningstekstene. Mens noen utredninger ikke refererer til forskning i det hele tatt, har andre hyppige referanser til forskning. Det refereres imidlertid i liten grad til forskning finansiert av Forskningsrådet.

Derimot har flere forskere som har støtte fra Rådets programmer bidratt til utvalgsarbeidet gjennom forberedte innlegg på seminarer og dialogmøter samt gjennom deltakelse i utvalgssekretariater.

Et annet gjennomgående funn er at brukere forholder seg lite til forskningsartikler og bøker. Når norsk utviklingsforskning tas i bruk i politikk og forvaltning, skjer det som oftest gjennom populariserte bidrag eller ved at man knytter til seg enkeltforskere for å dra nytte av deres ekspertise i arbeidet med stortingsmeldingen. Koblingene bygger ofte på eksisterende relasjoner, og begrunnes gjerne med henvisning til forskernes evne til å kommunisere forskning til politikfeltet. Alle norske forskningsinstitutter og enkeltforskere som blir omtalt i disse intervjuene, har mottatt støtte fra Forskningsrådets programmer for utviklingsforskning.

Politikernes kontakt med forskningen skjer i hovedsak via embetsverket i UD og NORAD, men i en del tilfeller er politikerne også direkte involvert i bestillinger av forskning og møter med enkeltforskere. I slike tilfeller er det gjerne snakk om kunnskapsoppsummeringer eller dialog med forskere som har særlig oversikt på et felt som har høy prioritet og aktualitet der og da. Klima, fornybar energi, skatt og kapitalflukt nevnes som eksempler på temaer hvor det har oppstått behov for spesifikk innhentning av forskning.

Intervjuene avdekker ganske ulike syn på balansen mellom uavhengig og tematisk/politisk orientert forskning. Mens noen etterlyser mer forskning på «de virkelig store problemstillingene», er andre mer opptatt av behovet for å sikre uavhengig forskning, dels for å unngå «politisk bestilt» forskning, dels for å skape et supplement til rådene fra embetsverket og NORAD. Flere informanter peker på at rotasjonen i UDs embetsverk gjør det vanskelig å bygge opp langsiktig ekspertise på feltet, noe som kan føre til lite systematikk i finansiering og bruk av forskning.

Et annet hovedinntrykk er at utviklingsforskningen brukes mest for å få oversikt aktuelle utviklingspolitiske spørsmål og evaluere tidligere innsats, mens vi ser lite bruk av forskning som grunnlag for utforming av framtidige prioriteringer og veivalg på feltet.

Utviklingsforskningens betydning for høyere utdanning

Høyere utdanning er en viktig, men ofte undervurdert kanal for spredning og bruk av forskning. Studenter tilegner seg forskningsbasert kunnskap som de så tar med seg ut i arbeidslivet og til andre arenaer utenfor universitets- og høgskolesystemet.

I denne rapporten har vi sett på utviklingsforskningens rolle som grunnlag for høyere utdanning på feltet. Vi har spesielt sett på den forskningen som har vært finansiert gjennom Forskningsrådet, og gjennomført intervjubaserte casestudier av de fire institusjonene som i dag tilbyr bachelorprogrammer i utviklingsstudier. Disse er Universitetet i Oslo (UiO), Norges miljø- og biovitenskapelige universitet (NMBU), Universitetet i Agder (UiA) og Høgskolen i Oslo og Akershus (HiOA). Alle institusjonene har også spesialiserte masterprogrammer i utviklingsstudier.

Av casestudiene går det frem at det både har vært indirekte og direkte koplinger mellom forskning finansiert gjennom programmene i Forskningsrådet og utdanningstilbudet ved institusjonene. Den indirekte koplingen er at forskningsprosjektene har vært viktige for å bygge opp og bevare fagmiljøer over tid, og dermed også for utviklingen og videreføringen av studieprogrammer. Den direkte koplingen er knyttet til at institusjonene som en av sine lovpålagte oppgaver skal tilby forskningsbasert utdanning.

Generelt har forskningen større betydning for den mer spissede mastergradsutdanningen, der forelesere og veiledere trekker mer aktivt på eget forskningsarbeid og pensum i hovedsak består av vitenskapelige artikler. Det omfatter ifølge informantene våre artikler skrevet på bakgrunn av Forskningsrådsfinansierte prosjekter. Noen informanter mener at de tematiske programmene i regi av Forskningsrådet har en såpass stor grad av «politisk nytteorientering» at de er vanskelige å bruke som generelt grunnlag i undervisningen og til å gi studentene en kritisk inngang til utviklingsfeltet. Det er imidlertid ikke en oppfatning som deles av alle informantene våre, og flere uttrykker bekymring for at

kutt i finansieringen av utviklingsforskningsprogrammene i Forskningsrådet vil svekke ikke bare forskningen, men også utdanningstilbudet i Norge på sikt.

Utviklingsforskningens betydning for bistandsorganisasjonene

Gjennom intervjuer med ti av de største norske bistandsorganisasjonene finner vi at organisasjonene i betydelig grad bruker eksterne fageksperter og konsulenter i sin virksomhet. Få av organisasjonene bruker imidlertid norske forskere aktivt i utviklingen av programaktiviteter. Derimot er det både mer vanlig og mer ressurser til å bruke norske forskere i evaluering av organisasjonenes programmer.

Generelt gir intervjuene få tegn på at norsk utviklingsforskning har satt varige direkte spor i bistandsorganisasjonene. Bistandsorganisasjonene som er intervjuet uttrykker generelt stor interesse for å gjøre mer systematisk bruk av forskning. De anser også den uavhengige forskningen som viktig, men kjenner generelt dårlig til resultater fra norsk utviklingsforskning generelt og Forskningsrådets satsinger spesielt.

For de organisasjonene som har kontakt med norske forskere, er kontakten etablert gjennom eget nettverk. Bistandsorganisasjonene som er del av en større internasjonal organisasjon, får i stor grad dekket kunnskapsbehovet fra egne kompetansemiljøer i utlandet. I slike sammenhenger bidrar forskning både til legitimering og læring internt i organisasjonen, noe som kan ha betydning for bistandsorganisasjonenes virksomhet over tid.

Mange veier til samfunnseffekter

Som et nytt element i evalueringer av norsk forskning har en rekke forskningsmiljøene blitt bedt om å levere inn eksempler på at forskningen har hatt effekter i samfunnet utenfor akademien, såkalte «impact cases». Drøyt 500 slike eksempler foreligger nå på flere områder av norsk forskning, primært innenfor samfunnsvitenskap og humaniora. Ved å studere dette materialet har vi fått mulighet til å se hvor mange eksempler som berører utviklingsfeltet og hva slags effekter det i så fall er snakk om.

I det store og hele er utviklingsperspektivet ganske godt representert i det foreliggende utvalget av eksempler, spesielt innenfor samfunnsvitenskap. Det er heller ikke overraskende ettersom en stor del av utviklingsforskningen i Norge foregår i samfunnsvitenskapelige miljøer. Videre ser vi at en stor del av eksemplene referer til finansiering fra Forskningsrådet.

Når vi ser på *typen* av samfunnseffekter finner vi at mange eksempler innenfor samfunnsvitenskap nevner effekter knyttet til menneskerettigheter. En god del eksempler kan også knyttes til jus/kriminalitet, naturressurser og kultur/holdninger. Sammenliknet med beslektede eksempler fra Storbritannia finner vi at de norske eksemplene i langt større grad nevner at forskningen har bidratt til å heve kvinners vilkår og rettigheter i utviklingsland. Når det gjelder *hvordan* forskningen får effekt, er den hyppigst rapporterte kanalen gjennom direkte påvirkning på internasjonal politikk via internasjonale organisasjoner, prosesser og innflytelse på internasjonale rapporter på feltet.

1 Introduction

Research and development is increasingly expected to address societal challenges, often of a global nature. Few research topics are more directly related to such challenges than development research¹. Understanding the impact of research in this area is therefore relevant and timely from a policy perspective. This report presents the findings of a study which seeks to trace the range, use and impacts of Norwegian development research. The study addresses development research in general, but special attention is given to the contribution of research projects financed by the Research Council of Norway during the last 20 years.

This chapter provides a general background for the study. Firstly, we discuss some main aspects concerning the study of impact of R&D in general and in relation to development research in particular. Secondly, we provide a short overview of Norwegian development aid policy and the research in this area. The latter includes a summary of main findings from previous evaluations of Norwegian research in this area.

1.1 Development research and the impact agenda

Traditionally, the effects and impacts of research investments have been analysed with an economic perspective and related to industry R&D. Hence, there is a broad range of studies concerning the impacts of R&D on innovation, growth and value added in firms (see i.a. Salter & Martin, 2001).

However, in more recent years, the emphasis on broader societal impacts has gained importance also in other areas of R&D. The need to understand and measure such impacts is indeed one of the megatrends in current R&D policies. Both national and international R&D strategies pay strong attention to this aspect. We also see cases where both reported and anticipated impacts of R&D are included as success criteria in evaluations of R&D and in the distribution of public R&D funding. Two prominent examples are i) the inclusion of mandatory impact cases, in the British Research Excellence Framework (REF) and ii) the impact criteria included in the EU-Commission's assessment of applications to Horizon 2020. The latter has, to our knowledge, gone furthest in terms of *ranking* R&D project-applications according to their expected societal impacts (Langfeldt & Scordato, 2015). However, the British REF-process stands out as the most comprehensive and systematic attempt to capture the societal impacts of R&D. Hence, the definition of impact underpinning the REF is often referred to as a standard definition of impact of R&D:

¹ In order to avoid confusion between the two meanings of the term «development», as i) the D in R&D-definition and ii) referring to developing countries, we will use the term “research” instead of the more accurate research and development (R&D) all along this report.

“Impact” is any effect on, change or benefit to the economy, society, culture, public policy or services, health, the environment or quality of life, beyond academia (REF, 2014).

This broad impact agenda is also gaining increasing importance in Norwegian R&D policy, for instance in the Government’s Long term plan for research and higher education (Meld. St.7 (2014-2015)) and in the current overall strategy for the Research council (RCN, 2015). One concrete manifestation of this trend is that impact cases, based on the British REF-model, has been included as an additional dimension in a number of RCN’s more recent evaluations². These impact descriptions are self-selected narratives, but provide nonetheless new insight in the processes and pathways through which Norwegian research has had concrete impacts on society. Parts of this material is also used a source of information for this study of development research (see chapter 8).

Indeed, there are already numerous examples where research and research based knowledge has had substantial impact on societal progress in developing countries. One recent example is the intense research effort to fight the Ebola pandemic that broke out in West-Africa in 2014. Through an extensive joint international research effort, a successful vaccine was produced, tested and made ready for use in time to control the most serious outbreak of the Ebola virus. Research can also have large impact in terms of raising awareness and mobilizing efforts around development issues. One famous example is when Bill Gates was shocked by a chart on mortality in the developing world in the 1993 *World Development Report on Health*. A few years later, Gates revealed that this was the “Aha-moment” that prompted him to set up the Bill and Melinda Gates Foundation and focus its efforts on tackling disease in the developing world (World Bank, 2012).

1.2 Challenges and caveats in R&D impact measurements

Although the impact dimension has gained in importance in R&D policies in recent years, the analyses and understanding of impact is far from straightforward. Based on experience from a previous NIFU-study of this kind (Ramberg et al 2015) and the general literature on research impacts, we consider three aspects particularly important to bear in mind:

- Firstly, the *time dimension* constitutes an important aspect and limitation. It often takes time, sometimes even decades before a completed research project has concrete impact on society. It is therefore questionable to look for impacts and even immediate results right after the completion of a project. Hence, the importance of following a line of research over a longer time span, as in this case where the period in question covers the years from 1994-2013.
- Secondly, the further one looks for broad and long term societal impacts of research, the harder it is to establish the causal link between the research and the impact in question. This is often referred to as the *attribution problem*. The impacts we consider may have been produced partly or entirely by other factors than research. And even though research has played an important role, it is often difficult to identify the exact researchers and research projects that have produced this impact. The latter is particularly relevant for development research, as such research by nature addresses questions where both the impacts and the research are linked to a global dimension.
- Thirdly, an additional challenge arises when the impacts are not only supposed to be linked to a type or field of research, but more specifically to a certain type of funding. In this report, the aim is to identify the traces and value added of the support to development research financed by the Research council of Norway (RCN). As most researchers and research groups receive funding from a variety of sources, it is difficult to distinguish and isolate the importance of one particular source of funding.

² For an overview, see <http://www.forskningradet.no/en/Evaluations/1233557971664>

Given the causality problems mentioned above, a number of studies have started to focus more on the *contribution* of R&D instead of attempting to establish causal links between R&D as input and societal impact as output (see for instance Levitt et al. 2010). This project is very much in line with this reasoning, as we seek to follow traces and use of research and thereby construct a broad impression of the types of impacts and outreach of Norwegian development research.

1.3 Major trends in Norwegian development policy

The Norwegian government allocates approximately 1 per cent of Gross National Income to development aid annually, which is a high share in international comparison and makes Norway a major donor country also in absolute terms. This raises a general concern for monitoring and evaluating the effects of the entire development aid portfolio. Regular monitoring of effects and impacts are important, both for the design of well targeted development projects and for the sake of accountability towards taxpayers. Hence, development policy is an area where impact in general is highly prioritised and frequently discussed. A recent example is the commissioning by the Norwegian Ministry of Foreign Affairs of an overview of evidence on the effects of development aid, as direct input to the recent White paper on development aid policy (Hatlebakk, 2016).

1.3.1 Brief historical backdrop

Following international development trends, the orientation and priority areas of Norwegian development policy has changed over time. Publicly funded development aid started up in the 1950s, and there was initially a strong focus on industrial and economic development. Subsequently, other perspectives have received increasing attention, including the environment and sustainable development from the 1980s and 1990s; democracy, human rights and good governance from the 1990s; and security, humanitarian crisis, conflicts and “failed states” from the turn of the 21st century (Stokke, 2010).

Moreover, with the end of the Cold War in the early 1990s, there was a marked international shift in development policy, where development and aid perspectives became more integrated in comprehensive policies for North/South-relations covering a broader range of policy areas, including trade, agriculture, environment, migration, etc. (Stokke, op.cit.)

Another more recent development trend in Norwegian development policy, has been an increasing concentration of efforts within selected geographical and thematic areas.

Current Norwegian policies in this area are expressed in the recent White paper on development assistance policy “Felles ansvar for felles fremtid” (Meld. St. 24 (2016–2017)) which was presented in April 2017. Here, Norway endorses and supports the collective global efforts to achieve the United Nations’ Sustainable Development Goals. Under this broad ambition, Norway has set the following five national priority areas:

- Education
- Health
- Humanitarian aid and assistance to fragile states
- Business development and job creation,
- Climate, environment and renewable energy.

This focus is also a central reference point and guiding principle for recent support mechanisms related to development research, i.a. in the recently launched NORGLOBAL-2 programme under RCN.

1.3.2 Main organisations and responsibilities

Development policy is an integrated part of Norwegian foreign policy, and the Ministry of Foreign Affairs (MFA) has the main responsibility for developing and administering national policies for multi- and bilateral aid and development cooperation. Other ministries, and notably the Ministry of Climate and Environment, are responsible for initiatives within their respective sectors.

The Norwegian embassies are assigned a central role in implementing national policies for bilateral development cooperation with countries in Africa, Asia, South-America and Europe. NORAD (the Norwegian Agency for Development Cooperation) is responsible for the quality assurance of public aid and development efforts. In addition to providing advisory services and commissioning independent evaluations, NORAD administers government funding for national and international aid organisations, development-related activities in higher education and research institutions, and development cooperation between Norwegian industry and partners in the Global South.

1.4 Norwegian development research

Development research is an established field of research in Norway, particularly within the social sciences. It emerged as a multidisciplinary field in the 1960s, and was initially carried out mainly by a small number of research institutes. Over time, many higher education institutions have built up research and study programmes within the field, organised in disciplinary departments as well as multidisciplinary centres for development studies (Stokke, 2010). Today, development research takes place in a broad range of Norwegian research institutions (see chapter 2 for a further overview).

Evaluation of Norwegian development research (2007)

An overall evaluation of the field was carried out by the Research Council of Norway in 2007 (RCN, 2007). In line with the findings in this report, the 2007-evaluation found that development research is spread on a large number of research units, mostly in the higher education sector. Based on the assessment of a selected number of units, the panel concluded that Norwegian research in the area was generally well funded and adequately staffed. The quality of research was also considered high, although with considerable variation between individuals and research units.

Particularly relevant in this context is the panel's assessment of the relevance and use of Norwegian development research. The general impression was that research in this area was relevant both for policy users, civil society and developing countries. The panel found a strong tradition for involving researchers in the field as experts in policy processes. At the same time, some user claimed that communication through scholarly journals and the general media was more prioritised than the contact with policy makers and other users in the field.

According to the evaluation panel, one major challenge for Norwegian development research was to maintain and strengthen research communication with users and at the same time cater for more independent development research with a critical distance to national aid authorities. One core recommendation was therefore to establish processes and structures where "researchers and policy makers could meet in arenas other than the funding arenas".

Evaluation of development research at the University of Bergen (2014)

In 2014, the University of Bergen (UiB) initiated an evaluation of their strategic priority area *Global and development related research and education* (UiB, 2015). Development studies at the university goes back to the 1960s, and has been a strategic priority since 1988. The evaluation was carried out by an international panel of experts. A general conclusion was that the overall quality and relevance of both research and education was high. There was a significant increase in research publications between 2004 and 2013, and the quality of the scientific output was generally assessed to be excellent. The panel considered the study programmes at Master's and Ph.d. level to be strong, and the career

trajectories of Ph.d. students to have high relevance, with many moving on to have influential careers within academia and the policy system.

Much of the global and development-related research at UiB was found by the evaluation panel to have high social impact, with many of the research units and researchers engaging actively with policy makers and implementing agencies, and thereby contributing to societal uptake of research outputs. One of the main recommendations of the evaluation panel, was that UiB should ensure that research projects are designed with strategies for communication and social impact from the outset.

Evaluation of Social Science Research Institutes (2017)

A third assessment of relevance for this study is the recent evaluation of Social Science Research Institutes in Norway, commissioned by RCN as part of a general assessment of all research institutes which receive basic funding from RCN. This evaluation was also carried out by an external panel, in this case consisting of Nordic social scientists (RCN, 2017).

Among the 20 research institutes assessed we find a handful of internationally oriented research institutes, some of which are among the core actors in Norwegian development research. According to the evaluation panel, these institutes represent a particular stronghold of Norwegian social science research, as they are able to combine high scientific production and impact with a strong user orientation and a well-developed international network. Christian Michelsens Institute (CMI) and the Peace Research Institute of Oslo (PRIO) are frequently highlighted as excellent examples in this respect.

Although the 2017 evaluation also emphasises the importance of independence and integrity, it considers close interaction between research and policy as a prerequisite for high quality and relevant research.

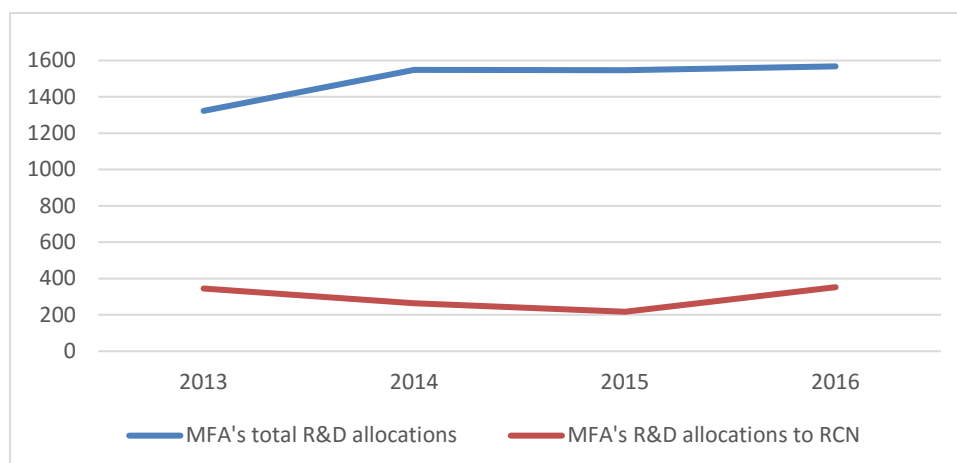
1.5 Main funding sources

As the majority of development research in Norway is carried out by higher education institutions, institutional basic funding from the Ministry of Education and Research (MER) is an important source of funding. However, as these funding streams have few thematic “strings attached”, the prioritisation of development research is to a large extent left to the internal priorities of each institution.

When it comes to targeted, competitive funding for development research, the MFA is the main source. This reflects the sector principle in Norwegian research policy, which means that each government ministry supports research within its own sector. As the ministry responsible for development policy, the MFA has allocated earmarked funding for development research over the development aid budget for many years. The objective has been three-fold: i) to develop and maintain research-based knowledge on aid and development-related issues in Norway, ii) ensure knowledge-based policy development and administration and iii) contribute to competence building in the Global South. Hence, a large share of the funding is allocated to research actors abroad. A substantial share of both national and international R&D support is also distributed through NORAD.

Most targeted programmes for long-term research and competence building in Norway is financed through the Research Council of Norway (RCN). The figure below shows the development in MFA’s estimated R&D allocations during the last four years, including the share allocated through RCN.

Figure 1.1: Estimated public R&D budget allocations from MFA. Total and share through RCN. Mill NOK 2013-2016



Source: NIFU/Statsbudsjettanalysen, RCN/Forskningsrådet i tall

MFA allocates most of its R&D budget outside RCN, whereof a large share consists of funding to research actors abroad. If we only consider national allocations, a noticeable share of MFA's R&D funding is distributed through RCN. As shown in figure 1.1, this funding stream amounts to just above 350 mill. NOK in 2016. After a declining trend in recent years, MFA's total allocations to RCN are now back to approximately the same nominal level as in 2013. These resources also cover research towards other foreign policy purposes, such as R&D projects for the High North, European policies and international technology cooperation. If we only consider allocations to development research, the general trend has been a decline and stagnation, in line with RCN's total R&D budgets from MFA.

1.6 Development research in the Research Council of Norway

The Research Council's role in supporting development research, consists of designing and running thematic programmes as well as open calls for independent researcher-initiated projects. RCN supports development research with the aim of generating knowledge both *about* and *for* development. The definition of development research in the Research Council has changed over time, reflecting changes in the orientation of national and international policies for development. According to the current RCN-definition, development research is

Research which is relevant for understanding interlinkages and transition processes on the global, national and local level, and can contribute to knowledge on the reduction of poverty, strengthening of human rights, and sustainable development.

Parts of this study focus specifically on a portfolio of RCN funded projects that falls under this definition and was carried out in the period 1994-2013. This portfolio consists of 10 programmes, which are briefly presented below and more thoroughly in annex 1. This selection was decided by RCN as a basis for this analysis. It should be noted that the study does not include all research on issues related to the Global South and sustainable development during the period in question. For instance, programmes for global health and vaccination research are excluded, partly because they have been subject to a separate recent evaluation. This analysis also excludes programmes that are more indirectly related to development issues.

Table 1.1: The 10 RCN development research programmes included in this study.

Programme	Period	Total budget (mill NOK) ⁽¹⁾	Funding ministry
The multilateral system in the field of development (MULTI)	1994-2005	46	MFA
Forced Migration, Resource Conflicts and Development (TVUMIG)¹⁾	1996-2001	18.5	MFA, MER
Fisheries in Developing Countries (U-FISK)	1996-2002	28.2	MFA, MER, Ministry of Fisheries
Multi-/ Inter-disciplinary Research on Development in the South (UTISØR)	1998-2007	170	MFA, MER
Consultative Group on International Agricultural Research (CGIAR) Fellowship Programme³⁾	2000-2012	22.3	MFA
South Africa – Norway Programme on Research Cooperation (SANCOOP)	2001-2017 ⁴⁾	110	MFA
Research on Poverty and Peace (POVPEACE)⁶⁾	2005-2013	140	MFA, MER
Norway – A Global Partner (NORGLOBAL)	2008-2013	355	MFA, MER
The Norwegian Programme for Research Cooperation with India (INDNOR)	2010-2019	205	MFA
Independent projects within environment and development research (REK-MU/FRIMUF)	1993-2011 ⁹⁾	185.7	MER

Note: Budget figures overlap. For instance, UTISØR and NORGLOBAL were established as broad “umbrella” programmes covering several existing programmes and activities, including some of the other programmes in the table, cf. Appendix 1.

Source: RCN

As the table shows, there is significant variation in the size of the total budgets. The programmes also differ in terms of their thematic and geographical orientation, goals and priorities, and supported activities.

The programmes fall into three main categories:

1) Thematic programmes

These programmes have focused on themes that are central in Norwegian development policy. Up until the late 1990s, these thematic programmes were relatively narrowly defined, but the establishment of *Globalisation and Marginalisation: Multi- and Interdisciplinary Research on Development Paths in the South* (UTISØR) marked a shift towards larger programmes with a broader thematic scope. UTISØR was succeeded by a new large-scale programme, *Norway – A Global Partner* (NORGLOBAL), which ran from 2008 to 2013 with a total budget of 355 million kroner.³ NORGLOBAL included several sub-programmes and activities, and a key strategic objective was to make Norwegian development research more coherent by consolidating much of the efforts in one single programme. The broader set-up of NORGLOBAL was also a direct response to critical remarks in the evaluation of development research in 2007, which i.a. emphasised a need for more visibility and coherence in development research programmes.

Generally, the thematic programmes have had two central and closely interrelated objectives. 1) to promote long-term competence building, i.a. through financing new PhDs and Post.docs. 2) to develop

³ The programme has been continued for a second period, NORGLOBAL – 2 (2016-2024).

a stronger knowledge-base for policy makers, administrative agencies and aid organisations, nationally as well as internationally.

2) Programmes for bilateral research cooperation

The ongoing SANCOOP and INDNOR programmes target research cooperation with South Africa and India respectively, both priority partner countries for Norwegian research. Each programme receives funding from the Ministry of Foreign Affairs in Norway and government sources in the partner country, and the main objective is in both cases to strengthen bilateral research cooperation through joint projects and initiatives.

From a development research perspective, it can be argued that these two programmes represent “hybrids” that combine the objective of promoting research on and for development in countries in the Global South, with the objective of strengthening Norwegian research cooperation with two priority partner countries.

3) Independent researcher-initiated projects

RCN also supports independent researcher-initiated projects through an open competitive arena covering research within all scientific fields. The *Independent projects scheme* (FRIPRO) is funded by the Ministry of Education and Research, and the main objective is to promote Norwegian research of high scientific quality. Support is awarded to both established and young researchers, with scientific merit as the main criterion.

The FRIPRO scheme has been in place for many years, with changing administrative and funding procedures. Up until 2012 *environment and development research* was a separate category with earmarked funding (referred to as REK-MU, and later FRIMUF). Unlike the other programmes covered by this study, the independent programmes have no thematic or geographical limitations, but give priority to projects that strengthen the knowledge base for sustainable development in less developed countries as well as on the global level.

Since 2012, there has been a reduction in the number of disciplinary and subject-specific categories of research with earmarked funding in FRIPRO, and development research has been included in the broader categories of – first, *the social sciences* – and from 2013, *the humanities and social sciences* (FRIHUMSAM).

A further description of the portfolio and each programme is provided in appendix 1.

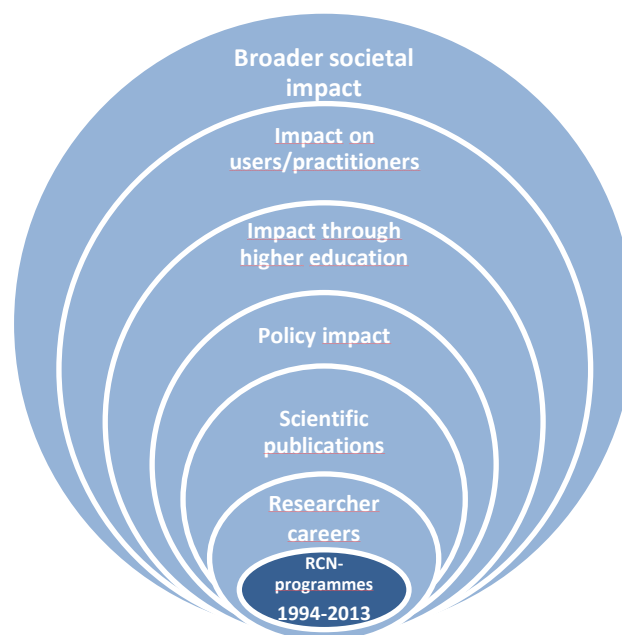
1.7 Approach and overview of this report

The main intention of this study has been to follow the long-term traces and impacts of the activities financed from the ten programmes described above. In order to do so, we have used a combination of different approaches and methods, some of which are experimental and based on novel data.

- *Chapter 2* captures the total volume of Norwegian development research through a special thematic module in Norwegian R&D-statistics.
- *Chapter 3* describes an exercise of career tracking, where we trace the careers of project leaders, PhDs and Postdocs with support from RCN’s development research portfolio from 1994-2013.
- *Chapter 4* presents a bibliometric mapping of Norwegian researchers’ co-publication with developing countries in general as well as a closer framing of Norwegian researchers’.
- *Chapter 5* describes the use of development research as expressed through a series of interviews with relevant politicians and public officials.

- *Chapter 6* describes the use of development research expressed through interviews with 10 central NGOs operating in the field
- *Chapter 7* seeks to identify the impacts of development research through its influence on development studies in Norwegian higher education
- *Chapter 8* makes use of new material from various impact cases delivered as part of recent and ongoing evaluations of Norwegian research
- *Chapter 9* briefly summarises main findings and points to some implications for research policy and funding.
- *Chapter 10* gives more thorough descriptions of data and methodologies as these are only briefly introduced in each chapter.

Figure 1.2: Main approach for tracing the impacts of development research.



Source: NIFU

Two cautions are important to raise at the outset:

Firstly, during this analysis, it has become clear that both quantitative and qualitative approaches have difficulties in distinguishing the impact of one funding source from another. As a consequence, this study is just as much about impacts of Norwegian development research in general than of the specific contributions from RCN.

Secondly, the project is initially based on a rather linear view of R&D impacts; *from* research *to* impact. However, it is evident that the interaction between researchers and users also works the other way around, for instance when users bear an impact on the research activities. Clearly, these complex patterns should also be considered in these studies of R&D and impact, but have not been within the scope of this project.

2 Overview of Norwegian development research: funding and actors

As development research is a cross-disciplinary and cross sectoral research area, it is difficult to define and measure with conventional categories and statistics. One of the recommendations from the evaluation of Norwegian development research in 2007 (RCN, 2007) was therefore to provide better measures for monitoring the activities in the field.

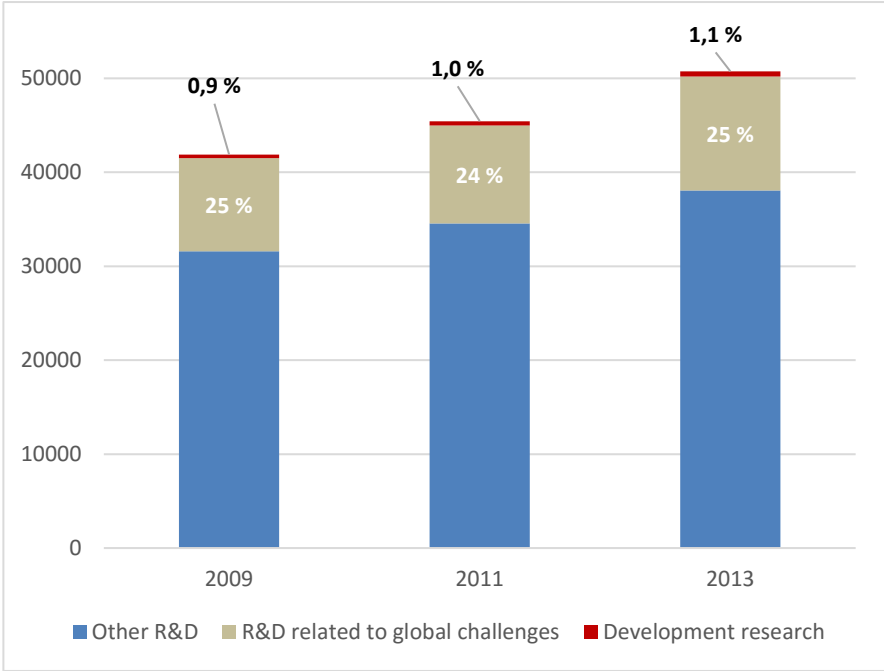
In this chapter, we use new elements in the Norwegian R&D statistics to better capture the totality of activities and actors as well as the recent trends in development research in Norway. Central questions are: How much of Norway's total R&D expenditure is devoted to development research? Who are the main institutions and research groups? What is the disciplinary profile of development research in Norway? This general mapping exercise is also supplemented with a bibliometric approach described in chapter 4.

2.1 Increased focus on R&D for global challenges

During the 2000s, global challenges have gained increasing importance as a dimension in Norwegian R&D policies and priorities. The so-called *Climate Commitment* in 2008 and the subsequent government white paper on research policy *Climate for Research* in 2009 (St.meld. nr. 20 (2008-2009)) established a general agreement across almost all political parties to strengthen efforts towards global challenges in general and environmental and climate issues in particular.

In parallel, global challenges was introduced as a general category in Norwegian R&D- statistics, comprising a number of sub-categories, such as energy, environment, health and *development*. The figure below displays the share of total Norwegian R&D-expenditure that has been reported as related to global challenges, including the share devoted to the sub-category *development research* for the years 2009-2013.

Figure 2.1: R&D expenditure related to global challenges as a share of total R&D expenditure. Mill. NOK 2009-2013.



Note: Data for 2007 are left out due to a change in sub-categories from 2009.

Source: NIFU/R&D statistics

According to these data, more than 25 per cent of Norwegian R&D is directed towards global challenges, while the specific sub-category for development research constitutes around 1 per cent of total R&D. Although the latter share is rather small, one should bear in mind that the category for development research is rather narrowly defined. In the guidelines for collection of Norwegian R&D statistics, Development research is defined as research oriented towards

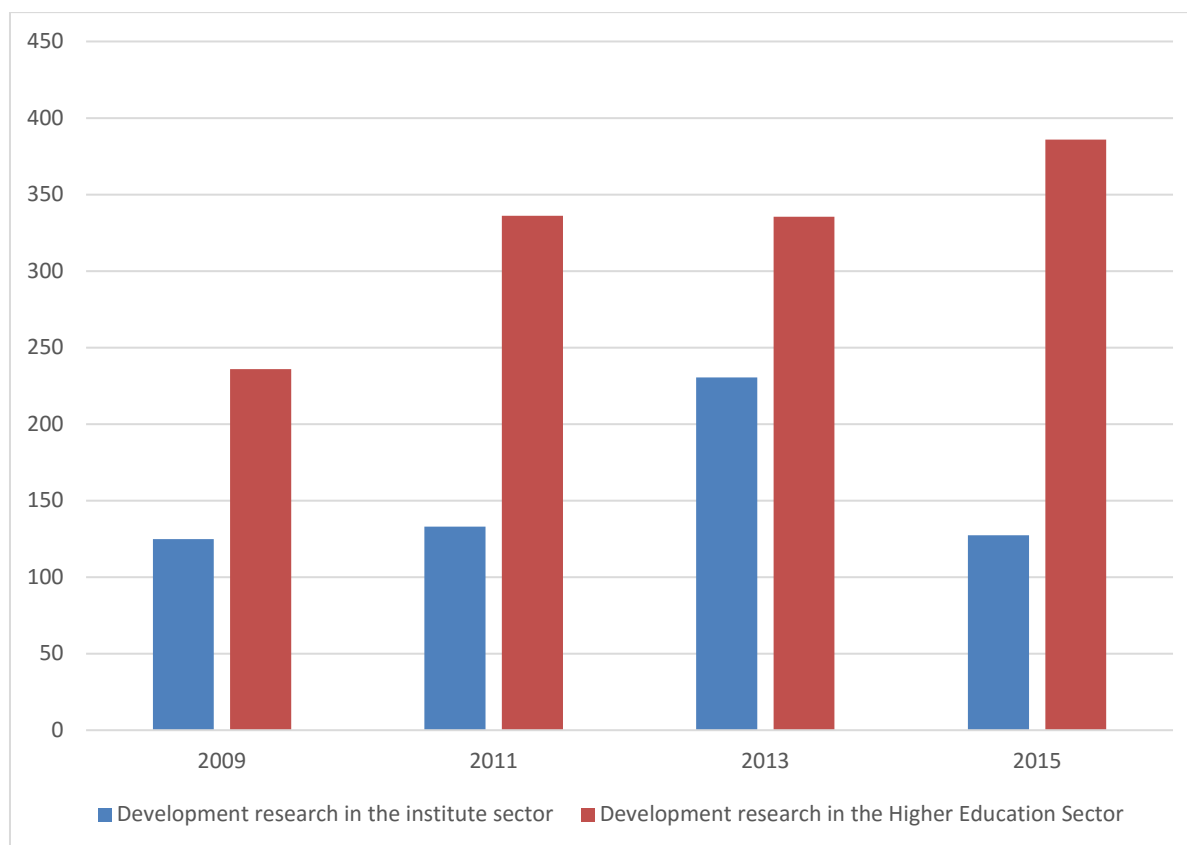
Poverty reduction, peace, democracy and human rights as well as measures aimed at strengthening the research capacity in developing countries.

Given the limits of this definition, it is likely to assume that “other” research related to global challenges may be directly and indirectly relevant for developing countries, even though the respondents have not reported the activity as such. The concrete sub-category *development research* should therefore be considered as a narrow definition.

2.2 R&D-expenditure devoted to Development research

These precautions notwithstanding, it is relevant to study the trends and patterns under this category for the years where such data is available. The figure below shows the trend in total Norwegian R&D devoted to *development research* since the collection of such data started in 2009.

Figure 2.2: R&D expenditure related to development research, by main sector of performance. Mill. NOK 2009-2015



Note: 1) Data for 2015 are not directly comparable with data from 2009-2013 due to a change in categories for thematic areas in Norwegian R&D statistics. Until 2013, *development research* was reported as a sub category of *global challenges*. From 2015, R&D institutions are asked to report on *development research* as a distinct category.

Source: NIFU/R&D statistics

Throughout the period we see that higher education institutions in total perform more development research in Norway than the institute sector. Data for the business enterprise sector is not available here since this sector is not asked to report R&D to development research⁴.

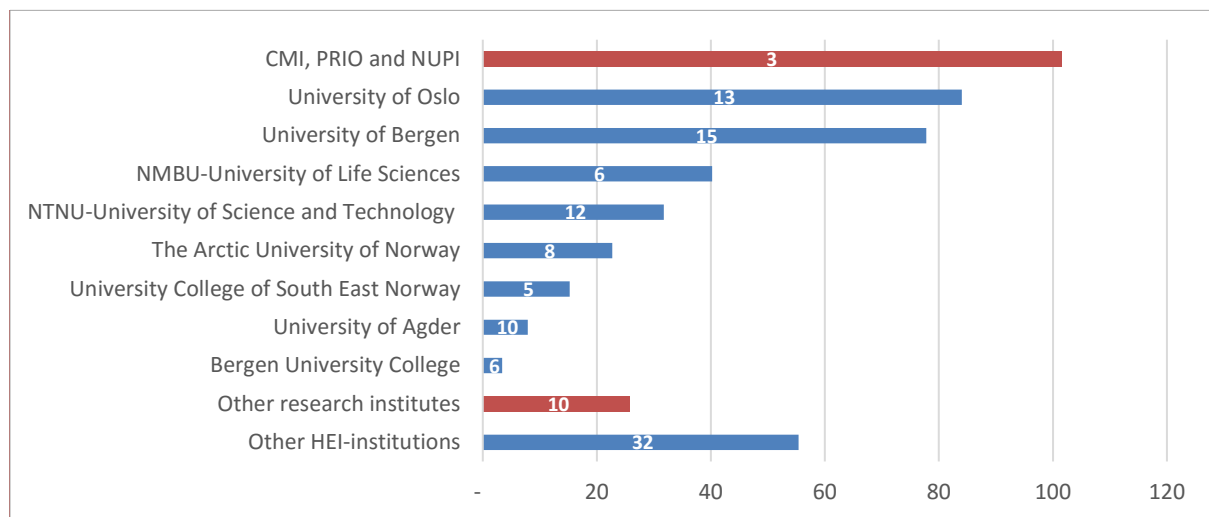
In total numbers, we see a steady increase in development research from 2009-2013 followed by a certain decline in 2015. As the figure shows, this decline is caused by a substantial drop in development research by the institute sector. Background checks with key respondents indicates that this is partly explained by the fact that one major actor in the area no longer finds their research to comply with the new definition of development research (see note to figure 2.2). However, parts of the decline may also reflect a real decline in public budget spending for R&D in this area.

⁴ This is based on the assumption that few private companies are involved in development research as such.

2.3 Development research actors: Who performs development research?

On average the share of R&D that is devoted to development research for the reporting units in question⁵ varies between 5 to 15 per cent. This means that development research often appears as a small sub-topic in departments and units where other topics constitute the main focus of research. There are (in number) few research institutes and departments where development research is a main topic.

Figure 2.3: Reported expenditure to development research by performing institutions. Mill. NOK 2015. (values on bars = number of sub-units/institutes).



Note: 1) According to established practice and concerns of confidentiality, data are not exposed for individual sub units. Hence, HEI-institutions with less than active 3 units in the field are presented together. Research institutes are also grouped in order to avoid exposing data on the level of individual institutes.

Source: NIFU/R&D statistics

On the institutional level, the four largest universities stand for almost 70 per cent of total development research in the higher education sector and nearly half of all reported development research in Norway in 2015. Among research institutes, the activity is even more concentrated as three institutes (CMI, PRIO and NUPI) together stand for 80 per cent of total development research in the sector and 20 per cent of all such research in Norway.

At the same time, development research follows a rather scattered pattern, since as many as 98 institutes at higher education institutions report some degree of development research in 2015. For instance, at the University of Bergen, development research is spread over 15 different institutes covering a broad range of disciplines and thematic orientations.

In the institute sector, we find 13 institutes which reported to have spent resources on development research in 2015. If we see this over the whole period from 2009-2015 we find that 23 research institutes have reported such research in one or several years. This means that there are quite a few research institutes where development research occurs occasionally, probably in connection with specific projects which are limited in time. Cases of "occasional" reporting of development research may also be due to problems of defining and categorizing R&D in this area.

⁵ With "reporting units" we mean units that have reported some degree of R&D in development research

2.4 The disciplinary orientation of development research

The annual reports of development research in R&D statistics also provide an opportunity to indicate the disciplinary profile of such research. More specifically, this profile can be constructed by looking at the main disciplinary profile of each reporting unit in the Norwegian higher education sector, and from assigning research institutes with development research to their respective disciplinary group of research institutes.

Table 2.1: Distribution and relative importance of HEI-units according to their main disciplinary profile in 2015.

Main disciplinary orientation of HEI-units with development research in 2015	Total exp. on dev.research Mill. NOK 2015	Discipline's share of total dev. research in HEI	Number of units with development research	Dev.research as share of unit's total R&D
Technology and Engineering	23,0	6 %	7	9 %
Humanities	20,0	5 %	11	8 %
Social sciences	242,2	63 %	61	18 %
Medicine and Health sciences	45,3	12 %	11	14 %
Agricultural sciences	19,4	5 %	3	12 %
Mathematics/Natural sciences	35,1	9 %	5	12 %

Source: NIFU/R&D statistics

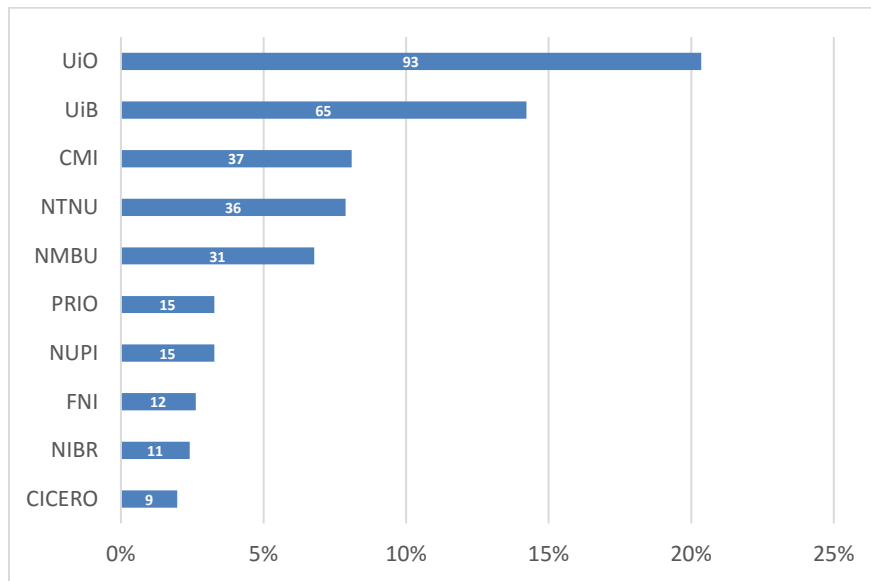
The table above shows that nearly two thirds (63%) of reported development research in the higher education sector is performed by research units which are totally or mainly oriented towards social sciences. Medicine and Health and Mathematics/Natural science appear as the second and third most important disciplines, while Humanities, Technology and Agriculture have a rather equal share with around 20 mill. NOK each in 2015.

A similar although less detailed pattern appears when assigning research institutes with reported development research to their respective group of institute. It then appears that more than 80 per cent of reported development research in the institute sector is performed by social science research institutes, while around 10 per cent is performed by environmental institutes. This means that agricultural and technical research institutes report very little development research in the official R&D statistics.

2.5 The profile and variety in RCN's development research programmes

Finally, it is interesting to compare the overview derived from R&D-statistics with the distribution of RCN's support to development research through the programme portfolio in question for this study (see overview in chapter 1 and annex 1). The figure below displays the 10 institutions which have received most projects from RCN's development research programmes during the whole 20 year's period.

Figure 2.4: RCN-projects granted under development research programmes 1994-2013. 10 largest grant receiving institutions. Share of all granted projects and number of granted projects (values on bars).



Source: RCN/Project Database

We see that the 10 largest grant receiving institutions together received more than 70 per cent of granted projects during the whole period. Among these 10 institutions we recognise the most important institutions that report development research in the R&D-surveys. This means that the bulk of RCN's support has gone to the institutions which today appear to be the most active development research performers. It is likely to assume that there is a certain effect of positive feedback loops here, in the sense that the strongest development research units also are best at retrieving RCN-grants, which over time contributes to strengthening the position of these research units and institutions.

At the same time, a closer look at the data reveals that RCN's project support has been distributed to a larger variety of research groups than the profile we see in the R&D-statistics. Firstly, it seems that RCN-grants to a larger degree have been awarded to researchers in other disciplines than social science. Secondly, we find a larger variety of institutions/units in the list of awarded grants. In comparison to the profile in reports to the R&D-statistics, RCN-grants have reached a larger number of researchers in hospitals as well as technological, environmental and primary research institutes.

2.6 Main findings

This mapping of Norwegian development research through R&D statistics provides new insight in the actors, activities and profile of this field of research from 2007.

A key finding is that development research is a specialised but far from negligible area in Norwegian R&D. In total, development research stands for around 1 per cent of total R&D expenditure in Norway. In addition comes activities which address global challenges and development issues more indirectly and which are not always reported explicitly as development research.

Based on the narrow definition and explicit reporting, development research seems rather widespread and involves more than 100 research institutes and units, often integrated as a minor sub topic at research units with other main thematic orientations. At the same time, we find that a handful of institutes appear to be specialised in this area, and these units account for more than 2/3 of all reported expenditure to development research. Development research in Norway seems therefore to be both scattered and specialised.

In terms of academic profile, social sciences stand out as the most important field, accounting for nearly two thirds of reported development research in the higher education sector and 80 per cent in the institute sector. All specialised development research units are also found within social science. Medicine and Health appears as the second most important research field. Given the general difficulties in identifying and estimating research in thematic areas, these data on development research must be treated with caution and seen in relation to other methods of estimating these activities (see in particular chapter 4 and 8).

Finally, we observe that RCN's project portfolio has reached the central institutions working in the field, but at the same RCN-grants have contributed to support development research in a broader set of disciplines and institutions than we see from the reports to R&D-statistics.

3 Competence building and career patterns

A main purpose of RCN-programmes in development research has been to develop research-based competence in this area, directly through the recruitment of PhDs and Postdocs, and more indirectly by engaging established researchers in development issues through a series of thematic programmes (see overview in section 1.6 and annex 1).

In this chapter, we focus on the careers of researchers that have been financed by RCN-programmes through the period from 1994 to 2013. Among the key questions are: To what extent have PhDs completed their projects and obtained a doctorate degree? Have researchers with RCN-support pursued academic or non-academic careers? What are the patterns of mobility of these researchers, within the research system and between research institutions and other sectors of society?

3.1 Career tracking: Main rationale and motivation

A general rationale for carrying out career tracking studies is to provide information on career movements and to understand mobility as well as employment patterns of researchers throughout their careers (ESF, 2013). This is often linked to questions of accountability, i.e. assuring funding ministries and funding agencies that allocations to research recruitment are well spent and contribute to increased research capacity.

In addition, studies of researchers' career patterns may reveal important information about the personal links and contacts between research organisations and other parts of society. For instance, in the context of this project, a major concern is how researchers interact with policy makers, NGOs (non-governmental organisations) and other actors in the field. The movement of researchers from one sector to another is indeed one way that research-based knowledge can be passed on to and integrated in organisations outside academia. International mobility is also of particular interest in an area such as development research.

Previous studies of researchers' career paths have found that researchers with prior work experience outside academia are more likely to be involved in collaboration with industry and society during their academic careers (see e.g. Abreu and Grinevich, 2013 and Van Rijnsoever et al., 2008). However, most of these studies have dealt with industry-science links and therefore focused on disciplines within technology and engineering. In a more recent study, Gulbrandsen and Thune (2017) include all disciplines and sectors when they examine the importance of non-academic work experience among Norwegian researchers in the higher education sector. They find clear positive effects of non-

academic work experience on researchers' external relations and thereby confirm that earlier findings also apply for a broader set of disciplines.

3.2 Data and main approach

With these findings as a point of departure, we take on to study the career paths of researchers who have received funding through RCN's portfolio of development research programmes from 1994 to 2013. In order to do so, we link RCN's project registers with NIFU's national Researcher Personnel Register (RPR). The RPR contains complete annual⁶ information of the employment status of researchers/university graduated personnel that participates in R&D at Norwegian higher education institutions, as well as research institutes, health trusts and other institutions with R&D activity in the Government sector. For simplification, we will in the following refer to the institutions included in the RPR as "the Norwegian research sector". The data and methodology is further described in chapter 10.2.

3.3 Overview of researchers in the RCN portfolio

Within the whole portfolio of RCN's ten development research programmes, we have identified in total 461 researchers who have received project grants or PhD/Postdoc scholarships during the last 20 years. The distribution of these researchers by type of grants are displayed in table 3.1.

Table 3.1: Researchers listed in RCN's portfolio of development research programmes 1994-2013, by type of grant.

<i>Type of grant</i>	<i>Number</i>	<i>Share</i>
PhD scholarships (3 years)	163	35 %
Postdoc scholarships (2 years)	37	8 %
Project grants (varying size and time frame)	261	57 %
Total	461	100 %

Source: NIFU's Research Personnel Register/RCN-Project database

In addition to these, a large number of researchers have been involved in research projects as partners and team members. However, since RCN's Project Database only contains the names of project leaders and individual grant receivers, we do not have the full overview of all researchers that have been supported by the programmes. On the other hand, it is reasonable to assume that project leaders as well as individual PhDs and postdocs are those whose research activities have been most heavily involved in the programmes in question, and hence that important parts of their research activities may be attributed to the funding from RCN's programmes in development research.

From an impact perspective, it is relevant to see whether researchers with support from the RCN programmes have followed academic career pathways or moved on to other areas of society. Indeed, both pathways may be in line with the main objectives of the programmes. On the one hand, academic careers contribute to building research capacity, educating future graduates in the field and disseminating research-based knowledge to society in various ways. On the other hand, grant receivers who later move on to other sectors can function as active, critical users of research and strengthen absorptive capacity within their organisations. Furthermore, cross-sectoral mobility of researchers constitutes an important channel for interaction between research institutions and other actors of society.

⁶ The RPR was updated biannually until 2007, with annual updates from 2007.

3.4 Overview of researchers outside the Norwegian research system

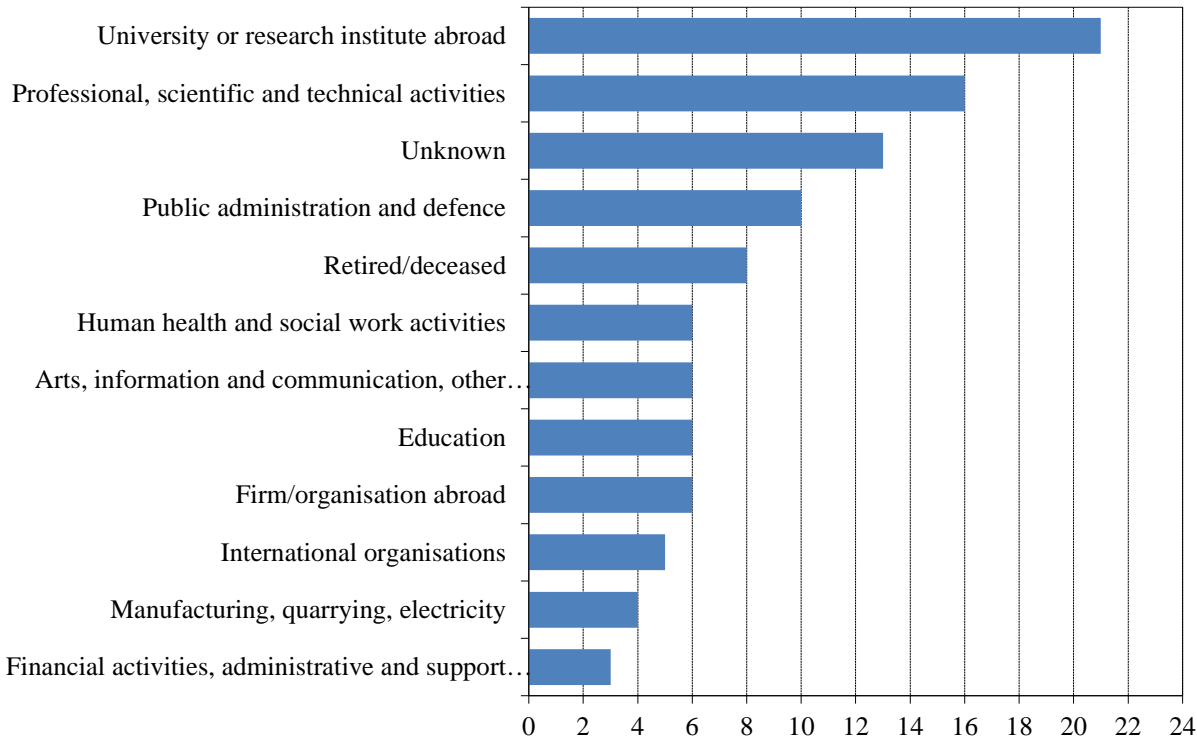
Among the 461 researchers in the portfolio, we do not have RPR data for a total of 27 persons. This does not necessarily mean that these persons are not included in the RPR, but based on their names it may be impossible to identify them with certainty in the RPR. We have therefore base our analysis on the remaining 434 researchers in the portfolio who appear in the RPR.

In our approach, researchers outside the Norwegian research sector will appear as non-registered in the RPR, which means that they are either abroad, employed in private companies or in other institutions outside the public research system. Among the 434 researchers, we find that 150 or 35 per cent appear to be outside the Norwegian research system in 2015. Among these, 46 persons were 65 years or older the last year they were registered in the RPR. We assume that these persons have left the Norwegian research system because of age/retirement.

This leaves us with 104 researchers who have received project or PhD/Postdoc grants from RCN and who hold positions outside the Norwegian research sector in 2015. Among these, 21 persons were retired, diseased or had an unknown employment status. The remaining group of 83 researchers have moved to sectors outside the Norwegian research sector during their careers.

Through manual internet searches via Google, LinkedIn and public registers we have been able to identify the current position of most of the 104 researchers. Their current status according to employment sector is showed in figure 3.1.

Figure 3.1: Labour market status for researchers with RCN-grants in development research who are outside the Norwegian research system in 2015 (N=104)



Note: The overview does not include researchers who were not registered in the RPR in 2015, and who were 65 years or older the last year they were registered in the RPR.

Source: NIFU, based on manual internet searches

Among the 104 «exit-researchers», positions at foreign universities or research institutes appears as the most common career path. Within this group, we find these researchers dispersed in 11 different countries, with Sweden as the most important, followed by UK, the Netherlands, Belgium and Ghana. This indicates that the RCN-programmes in question contribute to outward researcher mobility and that the programme objectives of increased capacity building in the field also should be seen in an international context. In other words, that RCN's support also contributes to increased research capacity outside Norway.

The second most frequent positions are in public administration or in consulting/scientific advice. In the latter category, we recognise quite a few consultancies which operate in the area of development aid and/or with international projects related to energy and environment. In the public administration category, we find researchers both in specialised foreign policy institutions and in sectoral ministries or agencies. Some of the researchers in our portfolio are today in leading positions and are involved in strategic planning within their organisations.

Perhaps unsurprisingly, only a handful of researchers in our portfolio have moved to positions in private companies. In these few cases, all companies in question are working in the energy sector, thus confirming that development projects related to energy constitute a priority and stronghold for Norwegian development activities.

Finally, we find few signs that researchers in our portfolio have moved to careers in non-governmental aid organisations in Norway (NGOs). This is somehow surprising, given the thematic relationship between development research and development aid organisations. Norway also has a relatively large variety of NGOs operating in the area, some of which manages a substantial portfolio of development activities and projects. This apparent lack of mobility of personnel between national NGOs and R&D institutions confirms, to some extent, the impression deriving from our interviews with NGO's described in chapter 8. At the same time, we find a number of researchers in our portfolio who today work at *international* organisations, such as the Red Cross, OECD, the World Bank and some other UN sub-organisations.

3.4.2 Temporary engagement outside the Norwegian research system

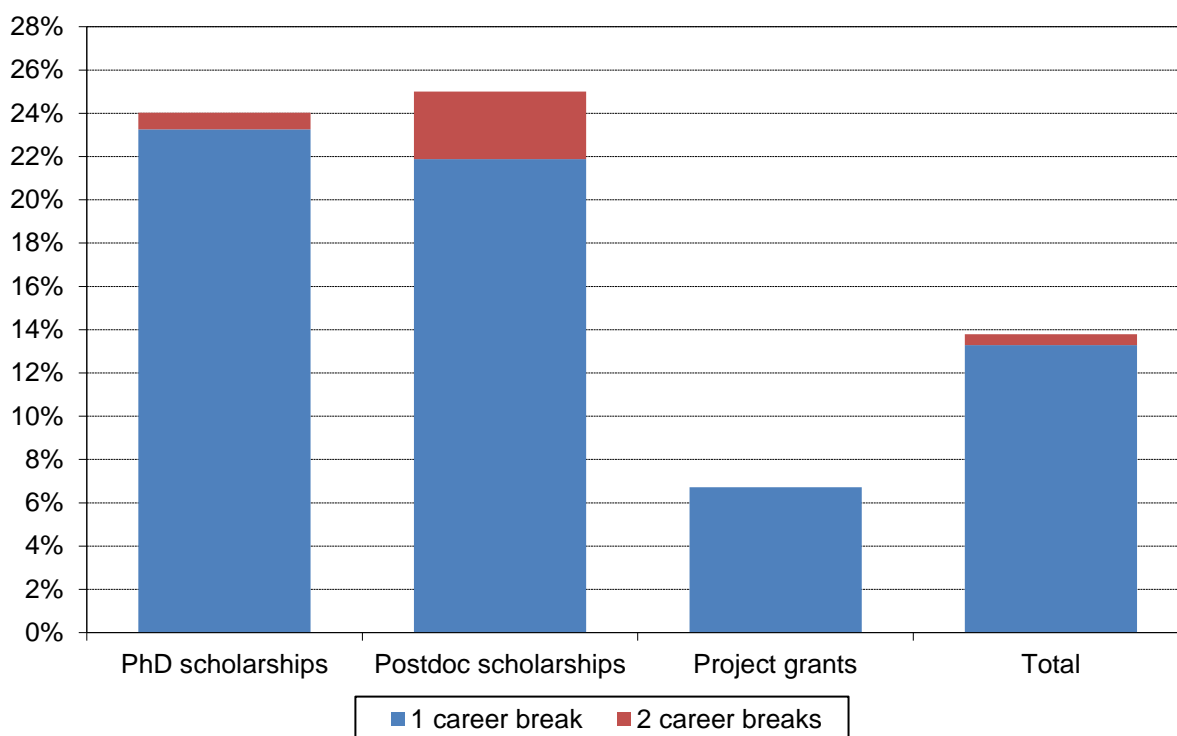
Some researchers may also have temporary positions at foreign research institutions or in non-academic environments before they return to a position at a Norwegian research institution. Such «career breaks» are interesting as they provide pathways to impact in both directions; within and outside research institutions. As pointed out above, previous studies have demonstrated that researchers with non-academic work experience are more likely to engage in user interaction and broader dissemination of their R&D activities (Gulbrandsen and Thune, 2017). Hence, researchers with «unconventional career paths» can strengthen the awareness of applied perspectives in academia and play important roles in research dissemination and networking.

In our portfolio, we find that 55 of 399 researchers,⁷ or 14 per cent of the 399 researchers, have had one or two career breaks from the Norwegian research system since they first received support from RCN.⁸ Within this group, almost all had one single career break. We found only a few cases where researchers have been in and out of the Norwegian research system two times and no incidents of three or more career breaks. Figure 3.2 displays the frequency of 1 or 2 career breaks by type of grants received from RCN's portfolio of development research programmes.

⁷ The 399 researchers represent the total portfolio of grant receivers, excluding the 27 persons for whom we are missing RPR data and 35 persons who are insufficiently covered in the RPR during the period in question (among the 461 researchers in the portfolio).

⁸ A career break is here defined as follows: A person has a career break if (s)he leaves the RPR and is not registered in the RPR in a subsequent period of at least 2 years, but then return to the RPR.

Figure 3.2: Career breaks by number of breaks and type of grants, 1994-2013 (N=399)



Note: The figure includes the 399 researchers who are either included in the higher education sector, the institute sector or the category 'abroad' in the RPR in the first year they received grants from RCN.

Source: NIFU, based on the RPR

The figure shows that most career breaks are assigned to those who received a PhD or Postdoc grant from RCN, while only a few project leaders have had temporarily career breaks from the Norwegian research system after they received a project grant from RCN. This is not surprising, given the fact that project leaders most often are established senior researchers with permanent positions. In general, there is little tradition for abandoning permanent academic positions in Norway, even for shorter periods of time. New PhDs and Postdocs, on the other hand, are often forced to search for long term and permanent positions, and in so doing they are more likely to try out alternative careers before they return to a researcher career. While this process can be a challenge for the individuals concerned, their search and trial of alternative possible employment may provide valuable pathways to impact and broader use of their research competence.

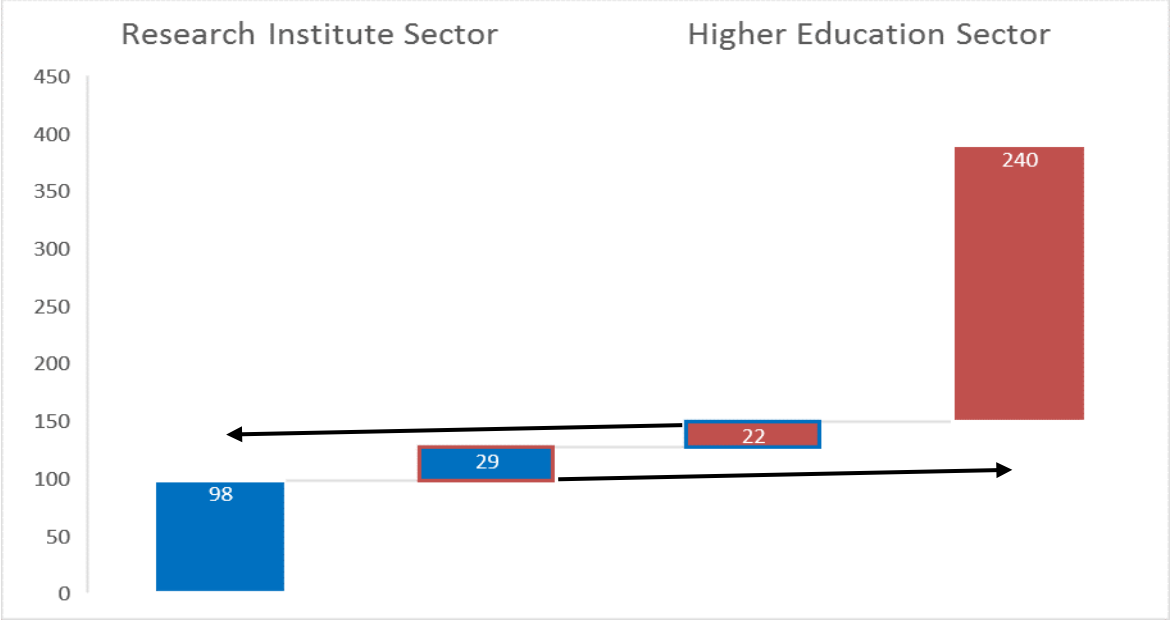
3.5 Mobility and career paths within the Norwegian research system

Career patterns are also interesting to follow within the national research system. As the RPR contains regular information on the sectoral affiliation of each researcher in Norway, we are able to capture whether researchers in our portfolio have moved between higher education institutions and research institutes in the period after they received support from RCN.

In this context, our initial population consists of all 461 receivers of project grants and PhD/Postdoc grants from RCN's portfolio of development research since 1994. After excluding those for whom we are missing RPR data and those with insufficient registration in the RPR, we are left with 399 persons (see footnote 15). Among these, two thirds were employed in the higher education sector when they

received their grant from RCN, while one third held a position at a research institute.⁹ Figure 3.3 illustrates to what extent these researchers have remained in the same sector or moved to the other sector since they received their first grants from RCN.

Figure 3.3: Sector mobility for researchers with development research grants from RCN, sector affiliation at first versus most recent registration in the RPR, 1994-2013



Note: The figure includes the 399 researchers who are either included in the higher education sector, the institute sector or the category ‘abroad’ in the RPR in the first year they received grants from RCN.

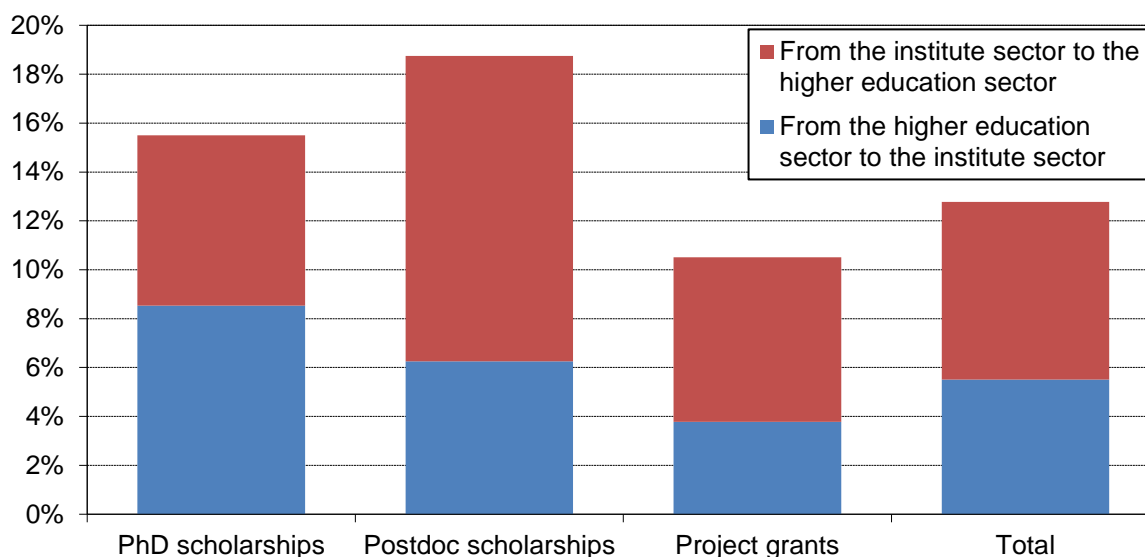
Source: NIFU, based on the RPR

The figure indicates clearly that most researchers seem to remain in the same sector after they received their grant from RCN. Although the number of exits and entries is rather balanced between the two sectors, the cross-sectoral researcher mobility is proportionally higher in the institute sector, as 23 per cent of the institute researchers have moved to the higher education sector, while only 8 per cent of the researchers in the higher education sector have moved in the opposite direction.

Furthermore, on the more detailed level, we see that most PhDs who switch to another sector, go from the higher education sector to research institutes, while Postdocs and project leaders more often move from a research institute to a career in the higher education sector. This mobility pattern is illustrated in figure 3.4.

⁹ Very few (3 per cent) of the 399 researchers were included in the category ‘abroad’ in the RPR.

Figure 3.4: Number of researchers who have switched research sector in the RPR since they first received their grant from RCN, by type of grant (N=399)



Note: The figure includes the 399 researchers who are either included in the higher education sector, the institute sector or the category 'abroad' in the RPR in the first year they received grants from RCN.

Source: NIFU, based on the RPR

3.6 Main findings

Based on register based career tracking, we find that by 2015 the large majority of researchers with support from RCN's programmes in development research, have pursued a research career in the Norwegian higher education sector or at a research institute. Their careers are thus in line with the objectives of increasing research capacity in this area.

Among those with alternative careers, we find a large group in positions at universities or research institutes abroad, thus illustrating the strong international dimension in this field of research. Furthermore, careers in policy/public administration and scientific consulting seems rather common, while we find few researchers employed in national aid organisations.

The propensity to have career breaks is substantially higher among PhD and postdoc grants than among project leaders. This indicates that experienced and established researchers are more reluctant to abandon permanent positions obtained in academia.

Some of this pattern is also apparent when we look at cross-sectoral mobility between higher education institutions and research institutes. The general pattern here is that researchers with PhD-grants are more likely to move to the institute sector, whereas postdocs and project leaders more often switch from the institute sector to the higher education sector. In total, however, most researchers seem to remain in the same sector as the one they belonged to when the first received support from RCN.

4 Publication patterns in Norwegian development research

This chapter presents an analysis of Norwegian development research based on publication indicators. In the first part, we provide an overall bibliometric overview of this field of research, partly based on analyses of Norwegian research collaboration with developing countries, partly based on studies of the Norwegian publication output in development studies. In the second part, we look more specifically at the publication outputs of researchers and projects financed through RCN's portfolio in the field (see chapter 1.6 and annex 1 for an overview of the programmes).

4.1 Norwegian research collaboration with developing countries

International collaboration is widespread and important within any research field. One of the most important changes in publication behaviour among scientists during the last decades is the increasing degree of international collaboration. This development is general and affects almost all countries. Using data on international co-authorship (publications having both Norwegian and foreign author addresses) we analyze the Norwegian research collaboration with developing countries. The analysis is based on the National Citation Report (NCR) for Norway, which mainly covers publications in international scientific journals, mainly (see Chapter 10.3 for further information).

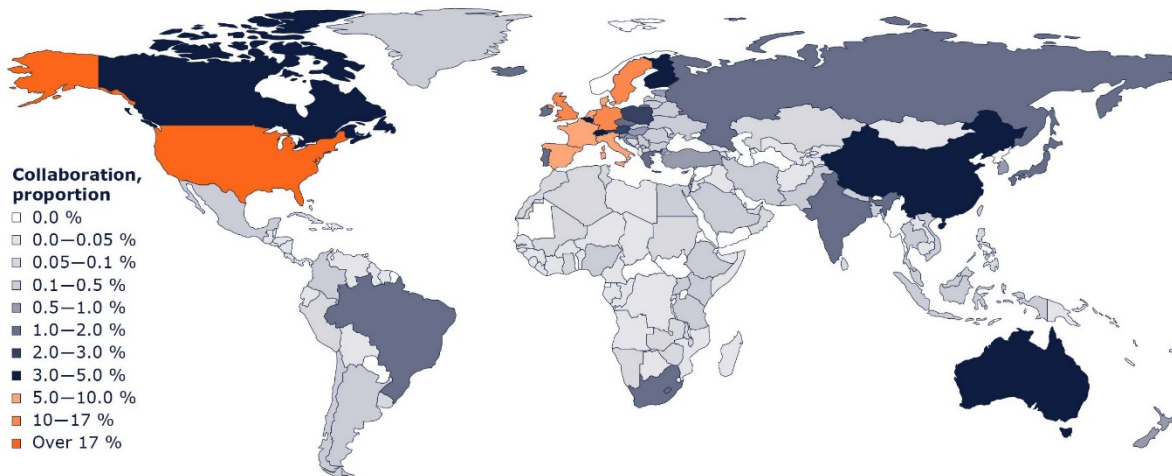
4.1.1 *Collaboration patterns*

Norway is strongly affected by the internationalization process described above. In 1981, 17 percent of the Norwegian scientific journal articles involved co-authorship with researchers from foreign institutions. This proportion has gradually grown, reaching 50 percent in 2005 and 64 percent in 2015. In other words, almost two out of three articles published by Norwegian researchers now have co-authors from other countries. Similar patterns can be found for many other countries. However, the percentage of articles with international co-authorship is generally higher in small countries. One reason is that large countries will have a broad range of research groups within the country available for collaboration, while researchers in small countries more often have to seek contact with research communities in other countries.

Naturally, the large majority of Norwegian research collaboration is related to the USA and other Western countries. However, Norwegian researchers cooperate with colleges in most nations of the world. This is shown in Figure 1, which is based on data from the years 2014 and 2015. The Norwegian collaboration profile is influenced by many factors such as the countries' size as research nations, geographical distance, cultural, linguistic and political barriers, history and traditions for research collaboration, etc. In general, countries collaborate more with their neighboring countries.

Norway is now exception and has long traditions for research collaboration with other Nordic countries. In addition, policy initiatives and funding promoting collaboration also contribute, for example by formalizing cooperation agreements which may open up new options for collaboration. At the same time, independent cross-border contact initiated and pursued by individual researchers is still a major driving force (Aksnes, Frølich, Slipersæter, 2008).

Figure 4.1: Illustration of the geographical collaboration profile of Norway. Percentage of all Norwegian articles with co-authors from each country, 2014-2015.



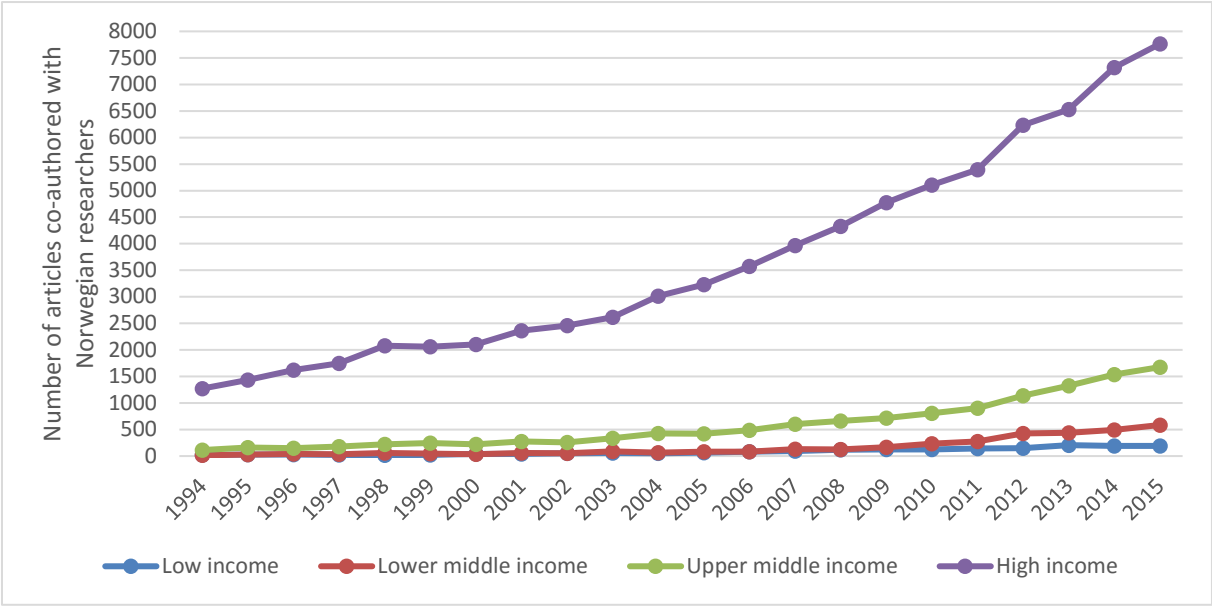
Source: Norges forskningsråd 2016.

In the following, we will zoom in on Norwegian scientific cooperation with developing countries. It should be noted though, that there does not seem to exist a generally accepted definition of developing countries, nor which countries fit this category. The World Bank classifies countries into four income groups based on gross national income (GNI),¹⁰ and we have applied this system in the analysis. The countries with low and middle incomes have previously been referred to as developing countries, but this term is no longer used by the World Bank.

Figure 4.2 shows the number of articles Norwegian researchers have published together with researchers from other countries by GNI-country groups. There has been a significant increase in the number of such articles for all groups of countries during the period 1994-2015. In absolute terms, the increase was largest for the high income countries, from approximately 1,300 articles in 1994 to almost 7,800 in 2015. However, in relative terms the increase has been strongest for the group of countries with lower-middle income. Here the number of articles has increased from 14 articles in 1994 to 585 articles in 2015. Within this group, we find countries such as India and Pakistan. The increase is more modest for the poorest low income countries, from 22 to 194 articles. One reason is probably that many of these countries hardly have established national research systems at all.

¹⁰ <https://datahelpdesk.worldbank.org/knowledgebase/articles/906519-world-bank-country-and-lending-groups>. Cf: «The gross national income (GNI) is the total domestic and foreign output claimed by residents of a country, consisting of gross domestic product (GDP) plus factor incomes earned by foreign residents, minus income earned in the domestic economy by nonresidents.»

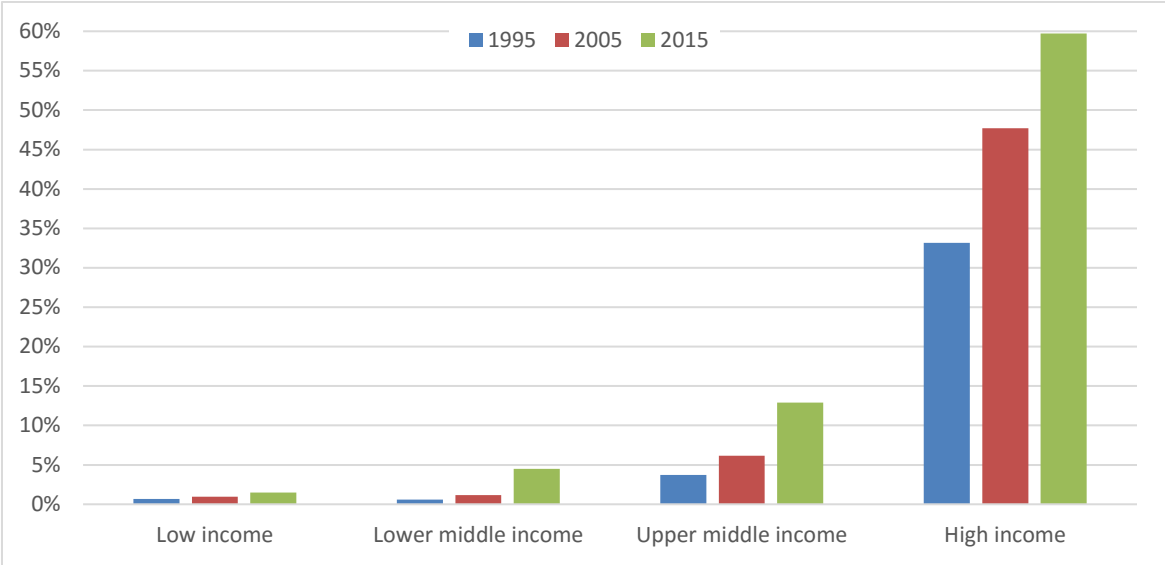
Figure 4.2: Number of articles with co-authors from other countries, 1994-2015 by GNI country groups.



Source: NIFU/Thomson Reuters.

Figure 4.3 shows the percentage of the total Norwegian article production with co-authors from countries in different groups. In 2015, 1.5 percent of the Norwegian articles were co-authored by researchers in low income countries, an increase from 0.7 percent in 1995. The corresponding figures for the group of countries with lower-middle income were 4.5 and 0.6 percent, respectively.

Figure 4.3: Percentage of the total Norwegian article production with co-authors from other countries, 1995, 2005 and 2015, by GNI-country group.



Source: NIFU/Thomson Reuters.

Table 4.1 provides an overview of the number of Norwegian articles with co-authors from other countries for the periods 1994-1995, 2004-2005, and 2014-2015. Only the countries in the low and lower-middle income groups are shown in the table. In addition, figures for South Africa are included as this is an important country in the programmes of the Research Council.

South-Africa is also the country with the highest number of Norwegian co-authorship, followed by India and Tanzania. In the first period (1994-1995), we only find a few articles per country, while in the last period, eight countries have 50 or more articles co-authored with Norwegian researchers: South Africa, India, Tanzania, Ethiopia, Pakistan, Uganda, and Egypt. Thus, to the extent that co-authorship reflects collaboration, there seems to have been a remarkably strong growth in research collaboration with these countries.

Table 4.1: Number of Norwegian articles with co-authors from other countries,* 1994-1995, 2004-2005 and 2014-2015, countries with low and lower-middle income.

Country	GNI country group	1994-1995	2004-2005	2014-2015	Country	GNI country group	1994-1995	2004-2005	2014-2015
South Africa	Upper-middle	10	70	376	Senegal	Low	1	0	5
India	Lower-middle	12	52	296	Dem Republ Congo	Low	0	4	4
Tanzania	Low	22	28	100	Bolivia	Lower-middle	0	2	4
Ukraine	Lower-middle	9	32	89	Armenia	Lower-middle	0	1	4
Ethiopia	Low	4	21	83	Niger	Low	0	1	4
Pakistan	Lower-middle	1	1	66	Kyrgyzstan	Lower-middle	0	0	4
Uganda	Low	1	24	61	Moldavia	Lower-middle	0	0	4
Egypt	Lower-middle	5	7	50	Rwanda	Low	1	0	4
Indonesia	Lower-middle	3	8	45	Cambodia	Lower-middle	1	1	3
Nepal	Low	1	13	40	Chad	Low	0	0	3
Kenya	Lower-middle	4	3	40	Guinea Bissau	Low	0	2	2
Bangladesh	Lower-middle	1	6	31	Cape Verde	Lower-middle	0	0	2
Nigeria	Lower-middle	0	1	30	Honduras	Lower-middle	0	0	2
Vietnam	Lower-middle	0	4	27	Kosovo	Lower-middle	0	0	2
Zambia	Lower-middle	0	6	25	Laos	Lower-middle	0	0	2
Zimbabwe	Low	5	11	23	Vanuatu	Lower-middle	0	0	2
Malawi	Low	0	0	22	Benin	Low	0	0	2
Ghana	Lower-middle	0	3	19	Gambia	Low	1	0	2
Sudan	Lower-middle	0	4	18	Ivory Coast	Lower-middle	0	0	1
Tunisia	Lower-middle	0	7	17	Nicaragua	Lower-middle	1	0	1
Philippines	Lower-middle	2	2	17	Papua N Guinea	Lower-middle	0	0	1
Sri Lanka	Lower-middle	1	1	16	Samoa	Lower-middle	0	0	1
Mali	Low	1	13	14	Swaziland	Lower-middle	0	0	1
Morocco	Lower-middle	0	3	13	Tajikistan	Lower-middle	0	0	1
Mozambique	Low	13	3	11	Afghanistan	Low	0	0	1
Cameroon	Lower-middle	0	1	11	Liberia	Low	0	0	1
Mongol Peo Rep	Lower-middle	0	2	10	Sierra Leone	Low	0	0	1
Guatemala	Lower-middle	0	1	7	Somalia	Low	0	0	1
Burkina Faso	Low	0	1	7	Myanmar	Lower-middle	0	1	0
Congo	Lower-middle	0	0	7	Yemen	Lower-middle	0	1	0
Uzbekistan	Lower-middle	0	0	5	Eritrea	Low	0	1	0
Guinea	Low	0	0	5	Bhutan	Lower-middle	1	0	0
Madagascar	Low	0	0	5	Cent Afr Republ	Low	1	0	0

*) Only articles with less than 100 authors are included in the figures.

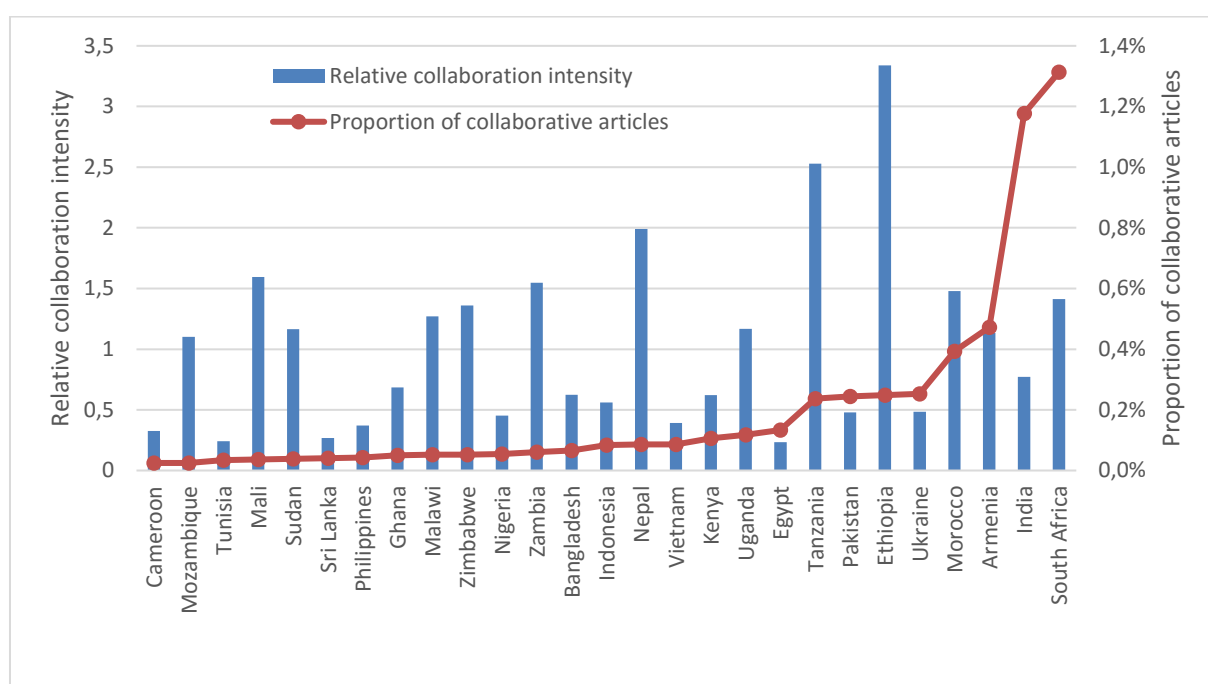
Source: NIFU/Thomson Reuters.

To provide more insight into these aspects of Norway's collaboration structure, figure 4.4 shows the distribution of collaboration measured both as proportion of the publications and as relative

collaboration intensity. The latter indicator is an expression of the observed/expected share of the collaboration.¹¹ If the number of the indicator is more than 1, the collaboration between two countries is higher than expected, given their size and tendency to collaborate internationally.

The figure is based on 2013 and 2014 publication data (2015 data not available). Ethiopia, is the country with the highest observed/expected share, with 3.3 higher than expected value (blue bars), followed by Tanzania and Nepal with observed/expected values in the range of 2.0 to 2.6. However, in absolute terms, Ethiopia is the 6th most important nation only, with a proportion of 0.25 per cent of Norway's international co-authorship links (red line). The country with the largest number of collaborative articles, South Africa, has a ratio of 1.4, clearly above average. This means that relatively speaking, Norway is a more important country for research collaboration for Ethiopia than for South Africa. This is related to the fact that Ethiopia is a much smaller country than South Africa when it comes to the size of the research system measure in article numbers.

Figure 4.4: The pattern of international collaboration with Norway for countries with low and lower-middle income,* 2013-2014 figures



*) Only countries with more than 10 collaborative articles in 2013 and 2014 are shown.

Source: NIFU/Thomson Reuters.

Although these results are on an aggregated national level, we note that the Research Council of Norway has funded particular programmes directed towards South Africa and India, the two highest ranking countries. Usually, collaboration patterns are influenced by a variety of factors such as those described above. However, many poor countries have less developed science systems which may make them less attractive as collaboration partners. Moreover, as factors such as linguistic and

¹¹ The relative importance of country Y for country X is calculated using the following formula:

$$\frac{C_{x,y} \cdot (T - C_x)}{C_x \cdot C_y}$$

where

$C_{x,y}$ = number of co-authorship links between countries X and Y

C_x = the total number of co-authorship links country X has with other countries

C_y = total number of co-authorship links country Y has with other countries

T = total number of co-authorship links

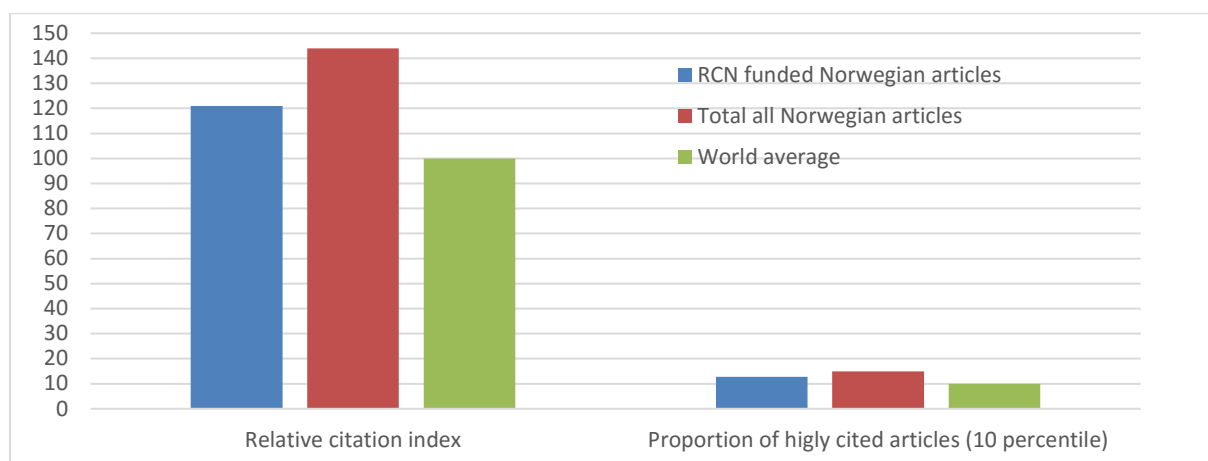
cultural proximity as well as geographical closeness may be barrier for research collaboration, targeted funding instruments may be particularly influential.

As described above, the analysis comprises all Norwegian publishing not just the results of the programmes of the Research Council of Norway (RCN). However, the database also includes data on funding, as funding sources that are listed by the authors in the articles are indexed in the database. Such information is registered for articles published after 2007. Although these data have varying quality (sometimes a researcher may have received funding without notifying this in the article), they provide interesting information on the role of funders.

About two thirds of the articles involving co-authorship with researchers from countries with low and low medium GNI-income have listed one or more funding sources. For the period 2008-2014 there were approximately 400 articles where RCN was listed as a funding source.¹² This accounted for about 15 percent of the total number of Norwegian articles that involved cooperation with countries with low and low medium GNI-income. Thus, a large majority of the articles were apparently not based on projects receiving RCN funding.

Nevertheless, NCR accounts for a significant number of articles and we made a minor survey to analyze the citation rate of the publications with the purpose of assessing whether the RCN funded articles differed from other articles. The analysis shows that the RCN funded articles obtained a citation index of 121, in other words they were cited 21 per cent more than the field normalized world average. Moreover, 12.8 percent of the articles were among the 10 percent most cited within their disciplines (Figure 5). The corresponding figures for all Norwegian articles involving collaboration with countries with low and lower-middle income were 144 and 14.9, respectively. The articles which are based on RCN funded projects are thus somewhat less cited than the set of comparable other articles. However, the difference is not very large and due to the uncertainty of the data quality we are not able to draw final conclusions on the impact of RCN funded research. On the one hand, the results may seem surprising since RCN funding usually involves peer assessments of the proposals. On the other hand, RCN funding encompasses many different programmes and funding instruments in which scientific quality may be attributed different weights.

Figure 4.5: Relativ citation index and proportion of highly cited articles (10 percentile) for Norwegian articles with co-authors from countries with low and lower-middle incomes, 2008-2014.



*) Only articles with less than 100 authors are included in the calculations.

Source: NIFU/Thomson Reuters.

¹² It should be noted that this figure also may include projects funded by other programmes than the ones analyzed in this report (e.g. FRIPRO which covers all fields of research).

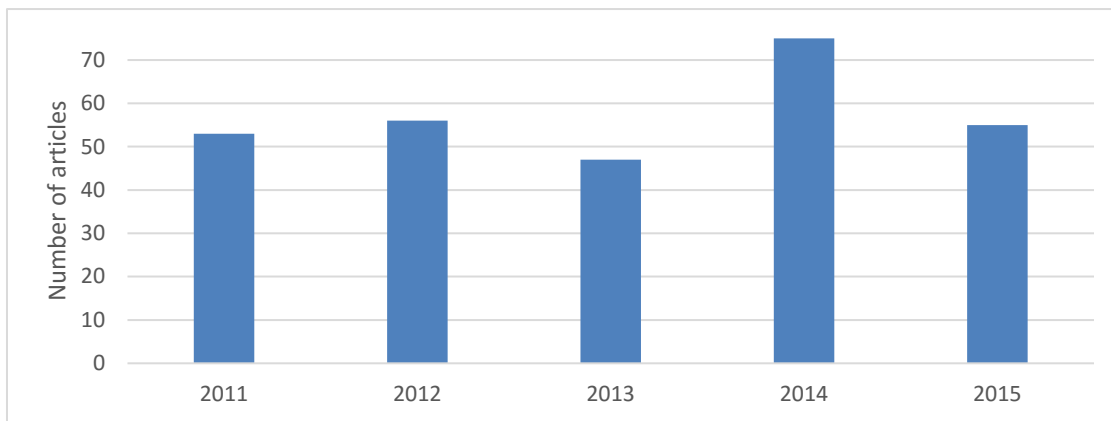
4.2 Publication analysis – development studies

In the following section we present an overview of the Norwegian journal publishing in the field of development studies. Here, we have used another data source, Cristin, which is a bibliographic database applied by institutions in the higher education, institute and health sector in Norway (see Chapter 10.3 for further information). There is a separate category for development studies which includes 77 international, mainly English language journals. Despite limitations, such as the fact that the classification system does not encompass book publishing, the analysis may yield interesting information on the national publication patterns within the field.

4.2.1 Publication output 2011-2015

The analysis shows that during the period 2011-2015, Norwegian researchers published almost 300 articles in development studies journals. The annual numbers show some fluctuations, with an average of approximately 60 articles, see Figure 4.6.

Figure 4.6: Number of Norwegian journal articles within development studies, 2011-2015



Source: NIFU/Cristin.

4.2.2 Thematic and institutional profile

In principle, quantitative indicators provide little information on the actual content of the research in each scientific publication. However, some indications of the content can be obtained by analyzing word frequencies of title words. The results for all development studies publications from 2011-2015 are presented as a cloud of words in Figure 4.7 below. In this figure, the size of a thematic key word is proportional to the number of times the word appears in the titles¹³. Apart from general and obvious words such as “Africa” and “development”, it is worth noting the relative high frequency of the words “land”, “rights” and “evidence”. The high frequency of references to Tanzania, Ethiopia and Malawi are also indications of the geographical profile of the research in question.

¹³ common words like and, of, a, the, etc. are deleted when assembling key words in word clouds.

4.2.3 Long term trends – publications in selected development studies journals

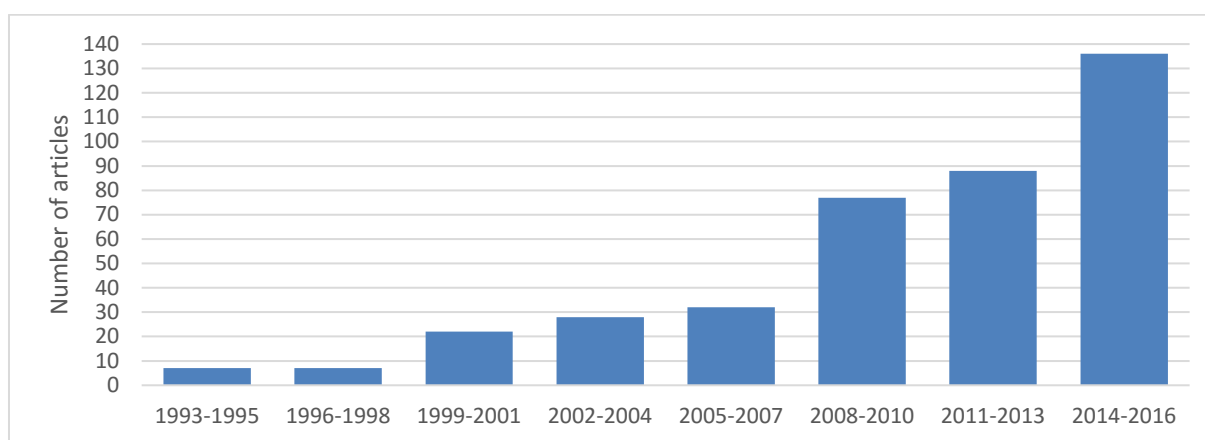
In this part, we present an analysis based on the NCR database instead of the Cristin database. The advantage is that we are able to trace long term trends using the NCR database. On the other hand, not all the journals classified within development studies are indexed in the NCR. Thus, the analysis has even stronger limitations in terms of data coverage (the analysis is based on 37 journals, cf Chapter 10.3). Nevertheless, the analysis may provide interesting information on the development of Norwegian development research from a bibliometric perspective.

During the recent 25-year period, there has been a strong growth in the Norwegian publication volume within development studies journals. This is shown in Figure 9. In the period 1993-1998 only a few articles were published annually, while more than 130 articles were published during the three-year period 2014-2016. Different factors may have contributed to this growth:

- More resources spent on research, resulting in more publications.
- Stronger focus among Norwegian researchers on publishing in international scholarly and scientific journals.
- Better journal coverage of the bibliometric databases (NCR/Web of Science)¹⁴

It is not within the scope of this report to assess this issue further, but probably all factors have contributed.

Figure 4.9: Number of articles in selected development studies journals per three-year periods, 1993-2016.



Source: NIFU/Thomson Reuters.

We also retrieved data on listed funding sources for the 2015 and 2016 articles (data not available for previous years). There were 26 articles where RCN was listed as a funding source. This accounted for 29 percent of the total number of Norwegian articles. Although based on a limited subset of articles, this indicates that RCN plays a significant role for the Norwegian research within the area. At the same time, a large majority of the articles are apparently not based on projects receiving RCN funding. These articles have not received external funding or are based on other funding sources.

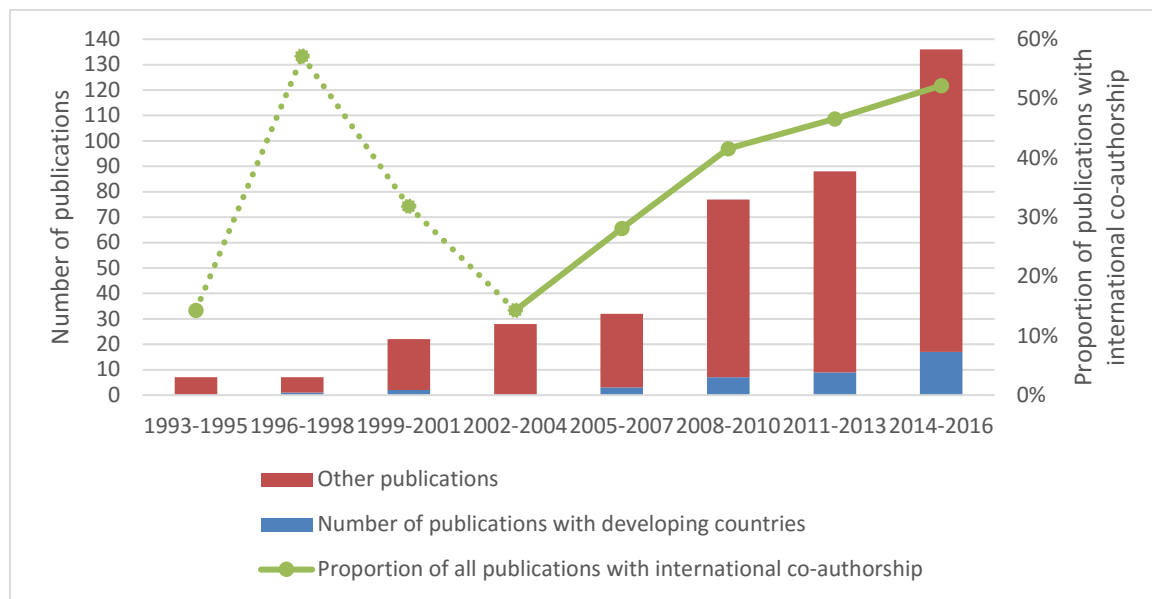
The collaboration profile of the articles has been analyzed using data of international co-authorship. As described previously, during the recent decades there has been a strong general trend towards increased international collaboration. This is also evident for the set of articles published in 2014-2016,

¹⁴ As an example, the *Journal of Refugee Studies* which appeared in 1998 (volume 1) was not indexed in Web of Science prior to 2008.

where slightly more than 52 per cent involved international co-authorship (Figure 4.10). This is slightly above the corresponding average for Norwegian social sciences which is 49 per cent. During the previous periods, there is an increasing trend albeit with large fluctuations, due to the small number of articles in the first periods.

Figure 4.10 also shows the number of articles co-authored with researchers in developing countries (low and lower-middle income countries). In 2014-2016, 14 per cent of the articles involved such co-authorship. In the previous periods the proportions have varied, but with an increasing trend.

Figure 4.10: International collaboration, proportion of publications with international co-authorship and number of publications with low and lower-middle income, 1993-2016.



Note: The small number of articles before 2002 makes it difficult to draw conclusions on the share of co-publications, hence the dotted line for this period.

Source: NIFU/Thomson Reuters.

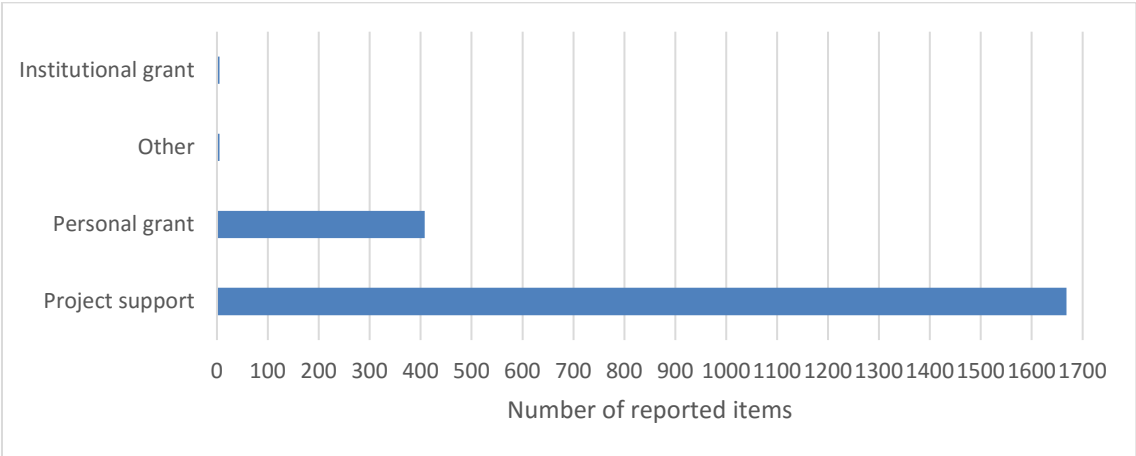
4.3 Reported project data - bibliometric analysis

The programmes funded by RCN have resulted in a large number of publications as well as other types of output. As a mandatory part of programme procedures, project leaders submit overviews of the outcome of the projects. In this chapter a quantitative overview of these reported output data is presented. Unfortunately, the quality of the submitted data is rather low and the data appear in an unstructured format. Therefore, we have not been able to apply the data material for a systematic bibliometric analysis. Nevertheless, we present some overall statistics on the number of reported items.

4.3.1 Distribution of output

Project funding accounts for a large majority of the reported output, in total 1670 items or 80 percent, while personal grants have 400 items or 20 percent (Figure 4.11). This is probably due to the fact that projects involve more activities and results than personal grants, which often result in one doctoral thesis. There are only a marginal number of items reported in the categories for institutional grants and the other.

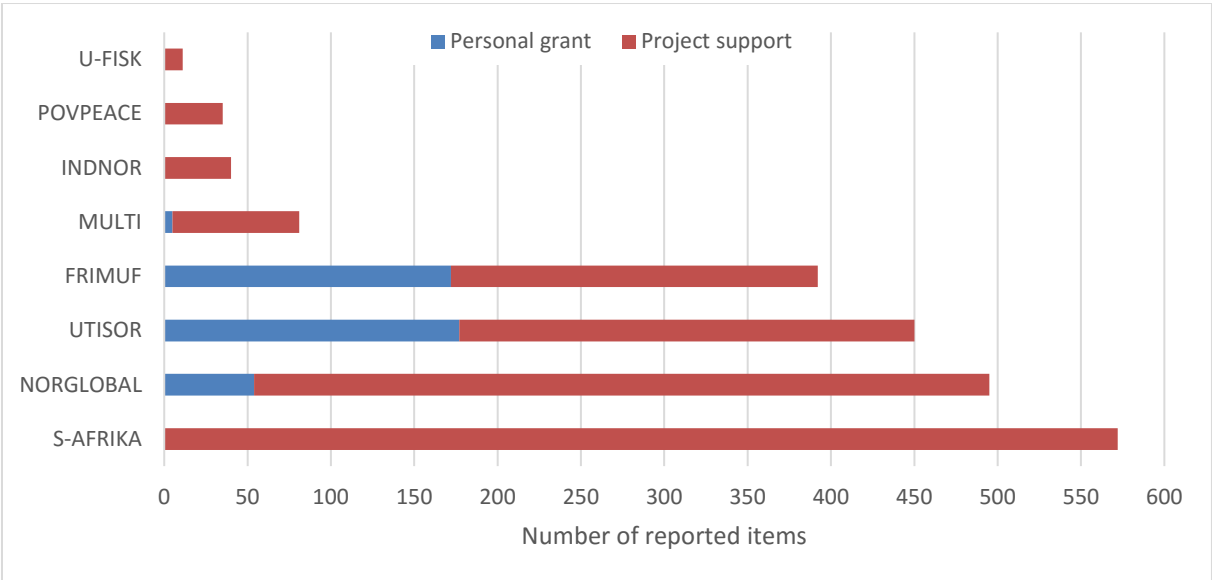
Figure 4.11: Number of reported items by type of funding



Source: NIFU/Research Council of Norway.

When we look at reported outputs by funding programmes, we find that the Programme for research cooperation with South Africa (SANCOOP AFRICA) has the largest number of reported results, almost 600 items (Figure 13). Then comes NORGLOBAL with almost 500, UTISOR with 450 and FRIMUF with almost 400. The other programmes (MULTI, INDNOR, POVPEACE, U-FISK) account for significantly smaller number of items, 10-80. Interestingly, these figures correlate only weakly with the total budgets of the programmes. The largest programme in terms of funding is NORGLOBAL (355 mill NOK), followed by INDNOR (205)(see chapter 1 and annex one for an overview of programmes). The programme with the largest number of reported items, SANCOOP AFRICA has a budget of 110 mill NOK while this figure is 170 mill NOK for the UITSOR programme. The reasons for these divergences have not been analysed further. Possibly the profile of each programme, their length, as well as variations in the coverage and reporting from each programme may explain some of the deviations.

Figure 4.12: Number of reported items by type of funding and programme



Source: NIFU/Research Council of Norway.

4.4 Publication analysis - PhD students and post docs

To obtain knowledge of the long-term effects of the Council's funding programmes, we have carried out a publication analysis of the individuals who have obtained PhD scholarships or postdoctoral fellowships throughout the 20-year period. In total, about 200 people have received such grants through the programmes. The analysis does not only cover the publication output of these persons while being funded by RCN, but also during the years following the fellowship period. RCN support has obviously been essential to the careers of these people. Therefore, it is of particular interest to analyze the entire publication output of these people, as their later or following publications may be considered as indirect and long term results of the initial RCN funding. The analysis is based NCR database, described in chapter 10.3. Although it would have been preferable to obtain data on the complete publication record of the persons, this has not been possible due to the lack of systematic bibliographic data.

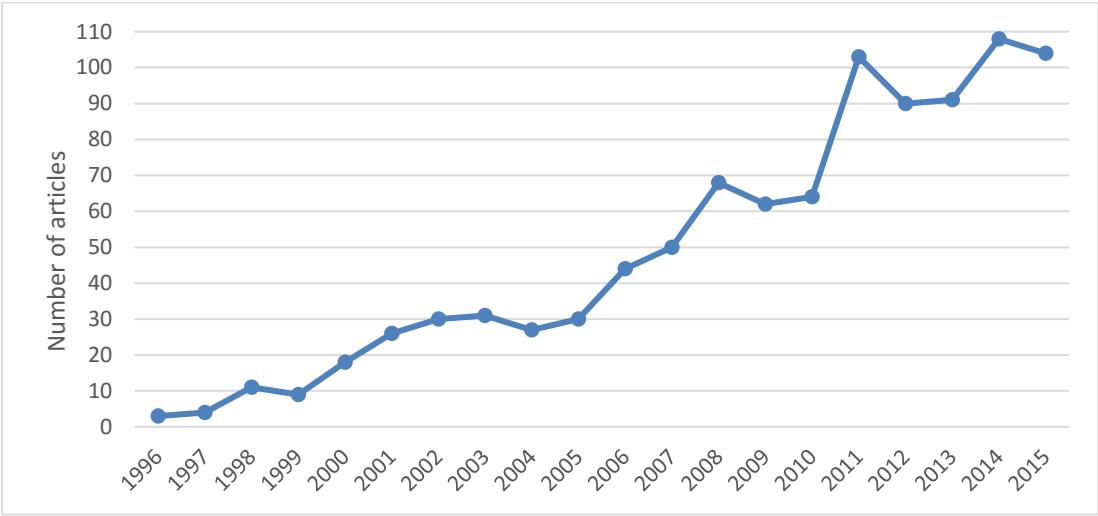
4.4.1 Publication output

In total, the researchers included in the analysis have published approximately 1,100 articles in NCR indexed journals during the period 1996-2015. Naturally, there is a strong increase in the total publication output over time (Figure 14). Firstly, because grants have been allocated over many years which means that the analysis encompasses more people in the last years than in the first. Secondly, the publication productivity of a researcher will typically increase over time. Finally, as seen previously, the coverage of the database has increased. In the most recent years, approximately 100 articles have been published annually by the researchers.

However, it should be noted that for quite a few people we were not able to identify any publications. In total, publications were identified for 135 of a total of 192 individuals (70 per cent). This may be due to the fact that some have not succeed in completing a PhD degree, others have published a PhD dissertation, only, while some researchers have a publication profile dominated by book publishing or other type of publishing. In order to provide further information on this issue, we made a search in NIFU's Research Personnel Register for non-publishing individuals. Of 57 people with no publications, 13 could not be identified in the Research Personnel Register. Of the remaining 44 people, 18 had obtained a PhD degree (of which five abroad). Thus, approximately 70 per cent of the non-publishing individuals had not succeeded and obtained a PhD or were not registered with positions in the Norwegian research system. The remaining 30 percent have obtained a PhD degree. Although appearing as non-publishing, they have probably published in books or non-indexed publication channels.

As in other research fields, we also find that the publication output is highly skewed. Some scientists have a considerable number of articles, while others have few or none. The latter also reflects that some of the individuals have left the scientific career path at some point during the period analyzed (see chapter 3).

Figure 4.13: Number of articles per year for selected researchers, 1996-2015

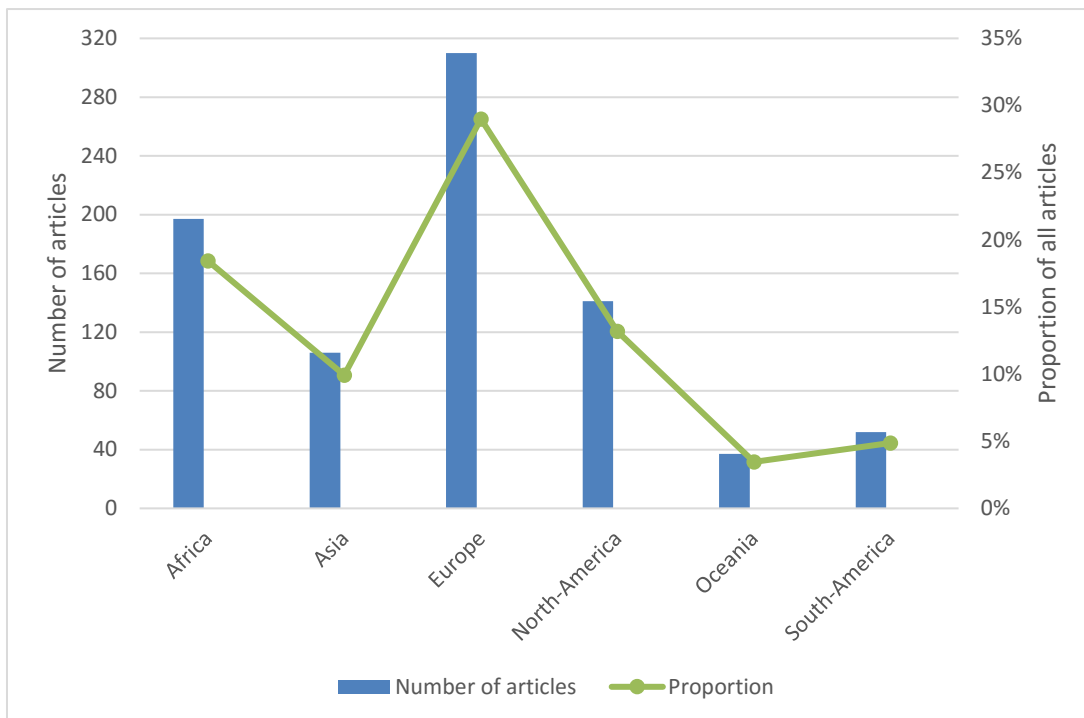


Source: NIFU/Thomson Reuters.

It is interesting to note that during the recent years, the PhD students and post docs have published approximately 100 articles annually. This is significantly higher than the corresponding Norwegian publication volume within development studies journals which is around 50 articles. Thus, many of the publications have appeared in journals which are not classified within development studies. In fact, only a small minority of the articles have been published in such journals. Among the most frequently used we find the general journal *Plos One*, *Journal of Peace Research*, *Norwegian Journal of Geography*, and *The International Journal of Tuberculosis and Lung Disease*. None of these journals are classified as development studies journals. Still, although not published in the specialized journals many of the articles may address development research. However, there are also many publications which do not have a development research content. This may be due to the fact that some individuals have received support for projects which thematically fall outside the definition of development studies. In addition, some individuals may have changed research focus in the course of their career, i.e. they are not any more involved in development research.

Overall, half of the articles (51 percent) had co-authors from institutions in other countries. Although researchers from European and North American countries accounted for the majority of cooperative relations, we see that a substantial share of the articles are co-published with scientists from other parts of the world. Roughly every third article had co-authors from institutions in Africa, Asia or South America (Figure 15). In particular, we find many articles with scientists in African countries (18 percent), where South Africa and Tanzania account for the largest number of collaborative articles. The proportion of "non-Western" co-authored articles is much higher than for Norwegian research in general. This indicates that the programmes have made a significant contribution in terms of building up long-term cooperative relationships with researchers in these countries.

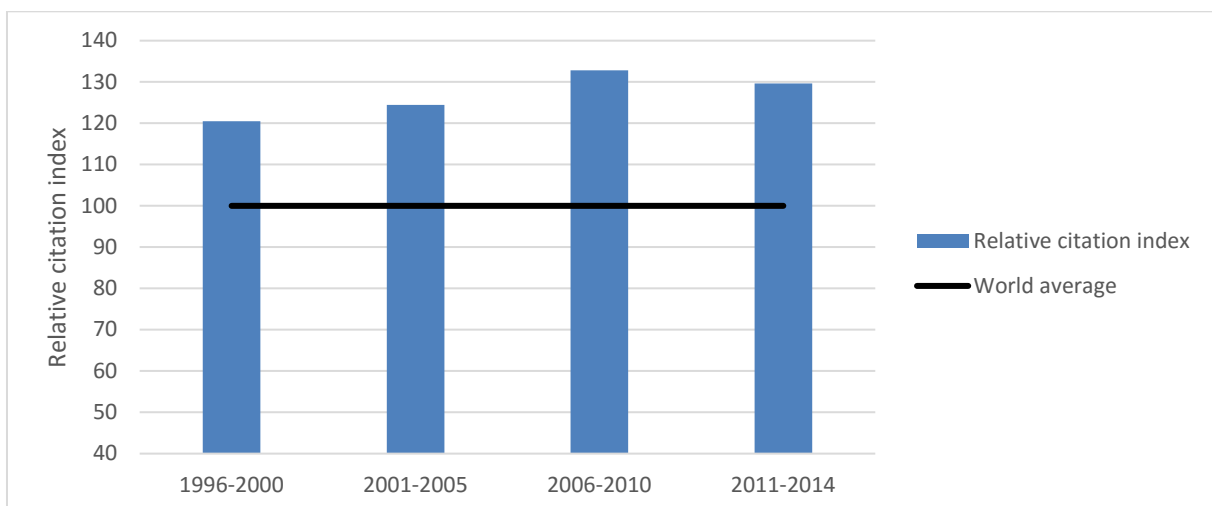
Figure 4.14: Number and proportion of RCN-articles with co-authors from other countries, by region.



Source: NIFU/Thomson Reuters.

Overall the articles have obtained a relative citation index of 129. This means that they have been cited 29 percent more than the corresponding world average. The citation rate shows a slightly increasing trend during the period 1996 to 2014 (Figure 16). The publications have been cited approximately on line with the total average for Norwegian research.

Figure 4.15: Relative citation index per three-year period, 1996-2014.

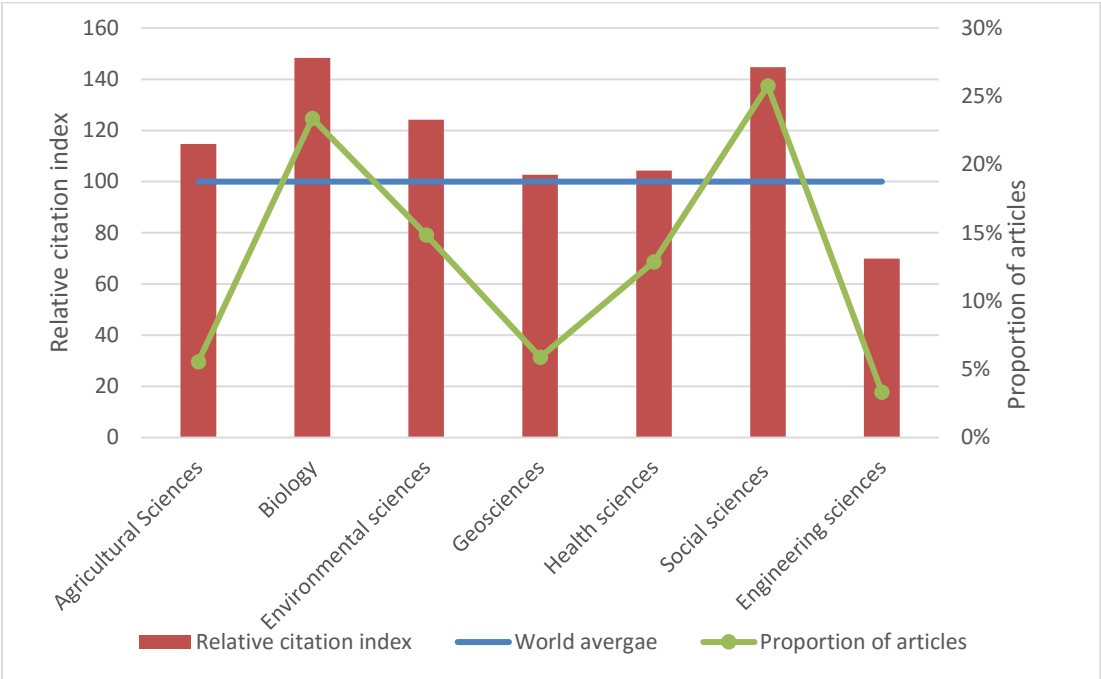


Source: NIFU/Thomson Reuters.

However, there are significant differences across fields, and both the biology articles and social science articles obtain citation indexes above 140. These are also the fields that account for the largest number of articles. Here it should be recalled that the database coverage of the social sciences

is more limited. Therefore, the social sciences would account for a much higher proportion if measured at the level of individuals.

Figure 4.16: Number of articles per field and relative citation index, 1996-2014.



Source: NIFU/Thomson Reuters.

4.5 Main findings

Although development research is an applied research field, academic publishing is important for the dissemination of the research and for ensuring a high scientific standard.

The analysis of Norwegian research collaboration based on co-authorship shows that there has been a significant increase in the number of such articles for all groups of countries during the period 1994-2015. In relative terms the increase has been strongest for the group of countries with lower-middle income. Here the number of articles has increased from 14 articles in 1994 to 585 articles in 2015. Within the groups of low and low-middle income countries, the number of collaborative articles with Norway is highest for South Africa, India, Tanzania, Ethiopia, Pakistan, Uganda, and Egypt. In terms of co-authorship we observe a particularly strong growth in research collaboration with these countries.

The analysis of the total Norwegian journal publishing in the field of development studies confirms to a large extent the broad picture deriving from R&D-statistics (see chapter 2): The major actors are the Norwegian University of Life Sciences (NMBU) and the University of Oslo (UiO), each with 17 percent of the total national publication output. The University of Bergen (UiB) and the Norwegian University for Science and Technology (NTNU) also have substantial shares of publications.

Furthermore, a group of internationally oriented social science research institutes play an important role, notably the Peace Research Institute (PRIO), Christian Michelsen institute (CMI) and the Norwegian Institute of international affairs (NUPI).

During the period 1994-2013, RCN's development research programmes have contributed to a substantial scientific production in the field. The total scientific journal articles from PhD-students and post docs from the programmes amounts to almost 1100. Half of these articles had co-authors from

institutions in other countries. Among these, we that the proportion of "non-Western" co-authored articles is much higher than for Norwegian research in general. This indicates that the programmes also have made a significant contribution in terms of building up long-term cooperative relationships with researchers in the Global South.

Overall the articles have been cited 29 percent more than the corresponding world average. The citation rate shows a slightly increasing trend during the period 1996 to 2014. Although there are various limitations of citations as performance measures, they provide an indication of the scientific impact of the publications. The publications have been cited approximately on line with the average for Norwegian research total.

5 Impact on development policy and administration

The purpose of this chapter is to investigate the impact of Norwegian development research on policy and administration. Both in politics and the public debate, ever more weight is attached to the use of research in the policymaking process. An evidence based or research based approach to policy processes is deemed to improve policymaking and service delivery, i.a. by enhancing the accuracy of policy means and measures, and to lessen the risk of implementing policies with undesired effects.

In the following sections, we describe firstly an attempt to identify and quantify the contributions of development research in relevant government white papers and public committees. Secondly, we address the policy impact of development research through interviews with both civil servants and former politicians in the Ministry of Foreign Affairs (MFA), the Norwegian Directorate for Development Aid (NORAD) as well as embassies in countries of particular relevance for the topic.

5.1 Main approach and rationale

In order to capture the contribution of research-based knowledge and expertise in politics, we have applied an actor-oriented approach. The locus of attention in this approach is on the policymaking arenas, and the degree to which researchers are included in policymaking processes.

This approach acknowledges that publications in scientific journals is not the main channel for disseminating research to politics. Such dissemination happens more often through targeted reports and notes and just as much through the researchers themselves, who communicate and interact with policy makers at various stages of the policy making processes. While recognizing that much of this interaction may happen in informal settings, we focus here on the policy making processes leading up to two key documents on the Norwegian political system: Norwegian official reports (NOU), and White papers to the Storting. NOUs are in-depth reports written by temporary committees to elucidate and advice on particular topics on a given mandate from their appointing ministry. They have a preparatory function in the policy process, and their recommendations may be followed-up in subsequent White papers or Propositions to Parliament (the Storting).

While the participation of researchers in these processes alone is a crude measure of their impact on politics, such engagement may be outlined as an essential condition for the dissemination of research to politics. Additionally, we have sought to trace possible links to research in the reference lists in the above-mentioned documents.

One disadvantage of this actor-oriented approach is that one cannot identify specific research results that have led to specific changes in policies. As such it does not resolve neither the causality problem nor the problem of attribution. It does however shed light on concrete interactions between the field of research and the field of politics, which can be argued to serve as a precondition for the impact of research on politics.

5.2 Impact on committees and councils

To trace the dissemination of development research into Norwegian policymaking processes, we have firstly investigated the degree to which researchers who have been awarded funding under the NRC-programmes have taken part on Norwegian public councils and committees producing NOUs. Such committees are collegiate bodies that bring together actors from different parts of society and have an advisory function in the political system. Committees and councils are therefore considered to be central channels for the exercise of influence on public policy making (Tellmann 2016).

To observe the participation of researchers on public committees and councils, we have done a thorough search in "Organbasen", a searchable database of members in committees and councils which has been updated annually since 2001. Before 2001, we use annually published lists of the composition of similar fora. See chapter 10 for a further description of the database.

5.2.1 Committees related to development policy

Seven public committees have been established between 1993 and 2009 to advise the Norwegian government on issues regarding Norwegian development policy¹⁵. All but one of the committees were established by the Ministry of Foreign Affairs. The committee on global environmental challenges and Norwegian policy (NOU 2009:16) were established by the Ministry of Finance. The committees have worked for a period of one to two years, and five of them published their reports on the NOU-series.

The committees have advised on different issues related to development policies. Three committees have discussed Norwegian policy for the South through a comprehensive approach, two have focused on policies for sustainable development, one has advised on the role of voluntary organisations, and one has discussed the issue of tax havens and development.

5.2.2 To what extent are researchers involved?

The committees included 74 members in total, of which 29 were researchers. Hence, about 39 per cent of members on the above mentioned public committees were active researchers, signalling a fairly strong involvement of researchers on such committees. There were however large discrepancies in the participation of researchers on the committees: Whereas 10 out of 16 members on the advisory committee discussing results in development policy (2003) were researchers, only 1 out 16 members on the committee behind NOU 2008: 14 "Samstemt for utvikling" was a researcher. The overall picture is however that researchers have participated slightly more frequently on these committees than on public committees in general throughout this period¹⁶.

5.2.3 How many experts were funded from RCN?

To what degree had the researchers taking part on these public committees been awarded funding from the ten RCN-programmes in question for this study? Out of 29 researchers taking part on committees, we find 12 that had received funding from the relevant RCN programmes. Note however that some of these committees were active before several of the RCN-programmes were initiated. Two

¹⁵ These were NOU 1995:5 Norsk sør-politikk for en verden i endring; Utenriksdepartementets rådgivende utvalg for resultater i utviklingspolitikken (2003); NOU 2005:05 Enkle signaler i en kompleks verden - Forslag til et nasjonalt indikatorsett for en bærekraftig utvikling; Nye roller for frivillige organisasjoner i utviklingssamarbeidet (2006); NOU 2008:14 Samstemt for utvikling; NOU 2009:16 Globale miljøutfordringer - norsk politikk; NOU 2009:19 Skatteparadis og utvikling.

¹⁶ Throughout 1996-2009, 21,9 % of members on policy preparing public committees were researchers.

of the researchers received RCN-funding after their participation on a committee. The researchers taking part on these committees had received funding from different programmes. These were: MULBIST, POVPEACE, NORGLOBAL, REK-MI, TVUMIG/UTISOR, FRIMUF, NORGLOBAL, INDNOR and S-Afrika. Some had received funding from several different programmes. Also, two of the committees were appointed with secretaries who also had been funded from the RCN-programmes. One of the committees commissioned a report from a researcher who had been awarded funding under FRIMUF. Additionally, two committees reported to have had meetings with researchers who had been awarded funding under the programmes.

Although based on a small number of experts and committees, the findings indicate that researchers with financing from RCN-development programmes have made concrete contributions to central policy making processes. This being said, the actor-oriented approach does not allow for distinguishing between researchers' dissemination of RCN-funded research and their general insight in the field.

5.2.4 *References to research in publications*

Tracing references to research-based publications in policy documents constitutes a more systematic and quantitative way of identifying the use of research in policy making. The approach resembles in principle the methods used in bibliometrics, but with far less accuracy and coverage in terms of data and references. For instance, reports issued by various committees vary extensively in terms how and how much they refer to scientific publications and other sources. One of the reports contained zero references, and another only five. Out of 551 references found in the remaining 5 reports, 60 per cent were references to scientific publications.

Five of these publications can be traced back to RCN-funded programmes. The remaining references referred mainly to reports produced by international bodies such as the UN and the World Bank. The very modest use of references to RCN-funded research shows that the dissemination of research from these programmes into committees have mainly been channelled through the personal involvement of researchers – in other words, more advice and interaction than published, citeable sources.

5.2.5 *Engagement in permanent councils and committees*

Like in most other countries, the Norwegian political system also includes a number of permanent councils and standing committees which offer advice to the government on a more regular and independent basis. A search on the participation of researchers funded by the RCN-programmes showed that the researchers in question have participated in a broad range of councils during the period in question (1994-2013).

In particular, RCN-funded researchers were heavily involved in the Advisory council for human rights (organized under the Ministry of Foreign Affairs). Other councils which included RCN-funded researchers were the Norwegian UNESCO-commission, The Norwegian National Research Ethics Committees, The National Council for Priority Setting in the Health Care, several councils under the Norwegian Scientific Committee for Food Safety, the Military Council for Research Policy and the Committee for Security Policy, Disarmament and International Challenges against Norwegian Security. We interpret researchers' participation on these councils as an illustration of the broad impact area that research may take.

5.2.6 *Participation on other policy advising arenas*

To what degree have the RCN-funded researchers participated as experts on other policy advising arenas? The EU also has an advisory system parallel to the Norwegian committee system, consisting of expert groups set up by the Commission or its departments to provide them with advice and expertise. Researchers often take part on expert groups as individuals appointed in a personal capacity. Non-EU citizens are also eligible for this role.

However, a search through the Register for Commission Expert Groups shows that none of the researchers who received RCN-funding has participated in EU expert groups in this role. Their absence from this advisory arena does however not imply that the researchers has not had international outreach outside of the academic system. Rather, their outreach are believed to be targeted at issue-specific arenas which are more difficult to assess than overall advisory systems like the Norwegian committee system and the system of EU expert groups. For instance, three out of eight Norwegian participants on IPCC Working Group II on Impacts, Adaptation, and Vulnerability for the fifth IPCC-report had received funding under the RCN-programmes. Other examples are the participation of Benedicte Bull on the Economic Commission for Latin America and the Caribbean, or the participation of Johanne Sundby as a member of the Scientific and Technical Advisory Group on reproductive health in WHO. Both are examples of targeted outreach outside the academic system linked to their specific expertise, which, inter alia, has been developed under the RCN-programmes.

In addition to act as experts on advisory arenas, several of the researchers in our portfolio have conducted evaluations or assessments commissioned by the Norwegian government or agencies abroad. While we have not carried out a comprehensive review of this activity, these are activities with an immediate policy relevance as they do research on a mandate given from a government/agency. Hence, such activity may be considered as indirect policy impacts of the RCN-programmes, in the sense that the programmes have contributed to build the competence and expertise of the researchers.

5.3 Use of research based knowledge in White papers

White papers are among the core policy documents in the Norwegian system. Officially, they present the government's main policy priorities and strategies to the Parliament (Storting), but also provide an opportunity to set the agenda in public debate. The documents are written by the Ministry editorial team, which also is responsible for ensuring that the White paper is based on available knowledge. The minister and government outlines the political foundation of the process and has the final say on the proposals and assessments in the White paper.

Despite an increasing tendency to arrange open arenas and hearings for external input, the processes of writing the papers and analysing options are often less transparent than the NOUs described above. Hence, apart from possible references in the final documents and written input from stakeholders, there is little official information about the contribution and involvement of researchers and other experts in the White paper processes.

In order to shed light on the roles of research in these processes, we have interviewed seven civil servants who have been editors /coordinators of the process of writing White papers in the Ministry of Foreign Affairs (see chapter 10 for a further description of the interview methodology).

5.3.1 Internal consultations and processes

All our informants described extensive coordination and consulting between different sections in the Ministry, which each have different subjects they attend after. In addition to ensure the coordination of policies among the sections, this internal consultative process was described by several informants as vital to build the knowledge base of the White paper. Additionally, several informants pointed to the role of NORAD (the Norwegian Agency for Development Cooperation), which is expected to be in close contact with relevant research communities, and thus updated on the latest research. Several informants described NORAD as a key channel for the communication of research into the Ministry and thus into the processes of writing White papers. This role was also confirmed by interviews with public officials in NORAD.

5.3.2 Hearings and stakeholder conferences

In line with similar processes, several informants told us they had organized advisory conferences¹⁷, where stakeholders from non-governmental organizations and the business community, as well as academics and other interested actors were invited to provide inputs to process. From the point of view of the informants, these conferences provided an arena where researchers could communicate information and outlooks on the issue under scrutiny alongside other concerned actors. Yet, with some exceptions, few researchers attended these joint conferences, and they therefore functioned less as an arena for the communication of research into politics than anticipated. This is perhaps not very surprising, given that researchers do not see themselves as stakeholders with interests in some course of actions. In fact, researchers are commonly reluctant to act proactively towards the political field, and claim to hold a disinterested position. This may also explain the finding that none of the informants reported to have been approached by other researchers wanting to shed light on issues to be discussed in the White paper.

5.3.3 Informal advice and input

Most of the informants reported that they had initiated informal consultations and other forms of exchanges with researchers during the process of writing the White paper. Some had invited researchers to hold presentations during seminars or meetings on relevant topics. Others had invited selected researchers to write short memos on specific issues. Some had also invited researchers to comment on specific draft proposals in the White paper or discuss general issues concerning the content of the White paper. One informant had also invited researchers to read drafts at the final stage of the process to assure the quality of the White paper. Informants on two White papers moreover reported to have commissioned reports that reviewed existing research on the topic under issue. However, none of our informants reported to have commissioned new research as basis for new policies and priorities.

Research in practice – researchers or their research?

Our interviews gave the impression that scientific articles and applied reports are rarely used as direct input to the preparation of White papers. A major source of information for several of the White papers were instead reports produced by international agencies, including the World Bank, OECD and relevant UN agencies. These were held as reliable and well-known sources of information for the informants, familiar to them from other tasks and projects in the ministry.

In general, informants seemed more inclined to be in contact with the researchers themselves to familiarize with research and to have analyses accommodated to the context of the White paper instead of drawing information from their written products. To them, this appeared to be a more efficient way of using research. This also implies that the communication skills of the researchers involved can be just as important as their analytical skills. In this context, our informants emphasized i.a. the researchers' ability to summarize the essence of the research frontier in a short and precise way, and to translate and relate complex research findings to the context of the White paper in question. As summarized by one informant:

we don't need long reports or theses, but short and precise analyses applicable to the matter at hand'.

A few informants also mentioned that they preferred researchers who could generalize and see the larger picture, rather than focus on the details.

5.3.4 Use of RCN-funded research

To what degree were researchers funded by the RCN included in the processes of writing White papers? The informants were in general familiar with the RCN-programmes on development research.

¹⁷ «Innspillskonferanser».

Yet, they were less familiar with the projects and researchers that had been funded by the programmes. As a consequence, they were neither familiar with the publications or the research findings resulting from the projects. This does however not imply that research from the RCN were unused in the processes of writing White papers.

Some of the informants reported that they contact individual researchers because they have specific expertise, either on the subject-matter or the relevant region, and because they held some of the previously mentioned qualities. Typically, this would be researchers who are also visible in the public sphere through regular media appearances or other public contributions. Several names were mentioned, and all of them had received funding under the RCN.

Other informants said they normally approach institutions or research communities they are familiar with, and who conduct research on the relevant subject matter. When asked which institutions and/or research communities they had been in contact with, nearly all informants pointed to institutions from the institute sector. Institutes frequently mentioned were NUPI, CMI and PRIO, who all have been large receivers of funding from the RCN-programmes. Other institutes mentioned, were FNI, Centre for Development and the Environment (UiO), Norwegian Centre for Human Rights (UiO)¹⁸, International Environment and Development Studies, Noragric (NMBU) and Department of Journalism and Media Studies (HiOA). Researchers from all these institutions have been awarded funding under the RCN-programmes, except for Department of Journalism and Media Studies (HiOA).

None of the informants mentioned disciplinary embedded faculties or institutes at the universities. This is rather striking, since these institutions have contributed extensively to the academic dissemination in the field and that higher education research units report all together more R&D expenditure on development research than the institute sector (see chapter 2 and 4). Another aspect worth noting is the geographical concentration of research institutions mentioned by core users. With the exception of CMI, which is probably Norway's most specialized research institute in development issues, the other institutions mentioned are based in or near Oslo. Although Oslo hosts many of the central actors in the field, the apparent geographical bias may also be a reflection of the aforementioned person-based contact between users and research in this area.

5.3.5 Barriers for the use of research in the processes of writing White papers

Despite varying use of research in the processes of writing White papers, all informants agreed that research constitutes a key foundation of White papers. Decisions about policy means and measures should be informed by the best available knowledge, as this is believed to improve the accuracy of decisions. This was formulated very explicitly by one informant, who stated that '*there should be no false claims in White papers*', and that research accordingly plays a vital role in ensuring that White papers are based on correct information.

On the other hand, several informants found it challenging to orient themselves in the abundance of research available on a given topic, and to extract the best available knowledge on the matter at hand. This was first and foremost seen as a problem of time and capacity, in other words that civil servants simply do not have the time nor the capacity to acquaint themselves with the '*insurmountable amount of available research*'. Secondly, some mentioned the challenge of navigating between contradictory research claims. This was perceived as a barrier to the use of research for political purposes, as one 'could always find research that made contradictory claims'. Thirdly, some informants expressed that research sometimes may appear as 'introvert', in the sense that it is written primarily for other researchers, and that it is difficult to extract the relevance for the policy field.

Accordingly, some informants called for more policy relevant research as a response to more of the challenges witnessed by the civil servants in the making of development policies. In line with this, some also called for more research into 'what works' or evidence-based research which systematically

¹⁸ Former Norwegian Institute for Human Rights

reviews the evidence of what is already known on a given topic. Others called for more proactive researchers, who would contact the ministry on relevant occasions to inform politicians and civil servants on ongoing research and to make their expertise known. At the same time, our informants generally recognised the importance of long term research and maintaining a proper balance between basic and applied research.

5.4 The policy and administration perspective

As a supplement to the perspectives described above, we have interviewed some former Ministers, State secretaries and Political Advisers, all with previous experience from several years in office at the development part of the Ministry of Foreign Affairs¹⁹. In addition, we have talked to public officials in NORAD, MFA and two embassies.

5.4.1 Views and experience from politicians

Among former politicians, all informants recognized the importance of high quality, relevant and independent research as a foundation for development policy. In practice, their use of research and interactions with researchers was initiated by and went through civil servants in MFA and NORAD, mostly because of time constraints. It was also pointed out that politicians in this area have a particularly tight schedule with an extensive travel programme and hence very few real occasions to interact with researchers personally.

Nonetheless, several informants could mention occasions where researchers were directly asked to contribute and give advice to ongoing policy processes. In most cases, this was related to a need to get comprehensive overviews of status and existing knowledge on issues emerging on the policy agenda. Development policy issues related to climate change, renewable energy, tax and tax havens were mentioned as examples of issues where researchers had been explicitly asked to inform policy makers directly.

The interviews revealed rather different opinions about the balance between independent/arms-length research and policy relevant/thematically oriented research. One former Minister considered lacking relevance to be a much more serious problem than the need for more independent research. This was based on a general disappointment that most Norwegian development researchers have been *«unable to properly address the big questions regarding global inequality and the social structures that drive progress in the long term»*.

Another former Minister emphasised the need to assure independent research, both as a way of safeguarding independent critical thinking and as supplement to advice from civil servants in the Ministry. Although our informants spoke highly of the competence and professionalism in both MFA and NORAD, several informants saw the established rotation system among staff in MFA as a challenge for building long term competence in the organisation. In this context, development policy was seen as one area where more permanent in house expertise in MFA might be needed, both for increasing absorptive capacity and for strengthening long term strategic thinking around the use and financing of R&D.

Despite differences in their use of development research, all politicians we have interviewed saw the need for more and better interaction between researchers and policy makers in this area. One main challenge is the discrepancy between politician's need for clear advice on short notice and researchers' culture for underlining complexity, caveats and uncertainty. There seems to be few established arenas where these two perspectives can be bridged. In this context, several informants

¹⁹ From the early 1990s until 2013, the Norwegian Ministry of Foreign Affairs has practiced a system of dual ministerial responsibility, with one Minister of Foreign Affairs and one Minister of Development.

mention that NGOs operating in the area have a much better culture for taking the initiative to direct contact with politicians, both those in position and towards politicians in opposition.

Another general impression from the interviews with politicians is that research in this area is mostly used in a “reactive way”, that is as a knowledge base for evaluating implemented policies and actions and monitoring ongoing processes. Development research seems less important as a basis for designing future policies and priorities.

5.4.2 Administration and public officials

Our interviews and input from public officials in MFA (including selected embassies) and NORAD confirm to a large extent the experiences from interviews with editors of White papers described above. For NORAD and MFA, it is important to balance both immediate needs for research based knowledge and build up national research capacity in the longer run. In this context, RCN-programmes are seen as important elements in the national R&D efforts in the area. Both MFA and especially NORAD is actively involved in initiating the programmes and often participate in programme steering boards. According to NORAD, it would not have been possible to manage the administration and quality assurance of support to long term strategic research programmes within their own organization. Informants also underlined the importance of a “sector neutral” financing source, as both MFA and NORAD are active in designing and implementing policies related to development aid.

Norwegian embassies are involved in the development, thematic priority setting, and administration of RCN programmes for bilateral research cooperation. The programmes are considered important sources of knowledge, as well as mechanisms for building bilateral relations. Embassy staff attend programme conferences, read abstracts and summaries of research literature, and interact with Norwegian researchers. Local knowledge sources, including both research communities and think tanks, are of particular importance, however. And it seems that it is mainly employees with a background from development studies or research administration who keep actively updated on research. While there is a general interest in research, one of our informants maintains that there lacks a systematic approach to support and make use of research-based knowledge in the Foreign Service.

Also among core users in the MFA and NORAD administration, there seems to be a general challenge to keep updated on relevant research and maintain in-house expertise over time. One informant in NORAD referred to an internal survey some years ago, which revealed that the lack of time was the main challenge for public officials to use research. Hence, researchers who combine expertise with good communication skills and ability to frame complex information in concise ways are frequently used as advisers, for instance in briefing politicians and public officials ahead of important meetings in international organizations and processes. For this type of research-based advice, framework contracts were seen as the most appropriate way of financing, while RCN-programmes and traditional contract research were considered less practical as they require more lengthy selection processes and give room for less strategic dialogue.

5.5 Main findings

One main conclusion from this chapter is that development researchers are frequently used as experts and advisers by politicians and public officials, while their scientific articles and reports are less mentioned as a direct source for decisions and policy processes. This pattern appears both from the qualitative interviews with users and from the analysis of references in policy documents.

The expert role is, however, not exclusively informal as many researchers also appear as experts in public committees and advisory boards. Another general conclusion is that research in this area seems to be used more often for the purpose of evaluations, overviews and insight in topics that suddenly emerge on the policy agenda. We find fewer references to more strategic use of research for shaping future strategies and priorities in the area. In other words, we observe an emphasis on research for “policy readiness” instead of research as a “strategic and corrective factor”.

6 Impact on development aid practice and organisations

Non-governmental organisations (NGOs) operating in the field of development aid constitute another group of core users and stakeholders for development research. To gain insight in their interactions and experiences with development research, we have interviewed a strategic selection of development aid organisations supported by the Norwegian government. In these interviews we have also tried to uncover to which extent and how these organisations make use of research funded by the Research Council of Norway (RCN) in long-term development aid activities. The key questions underpinning this approach are:

- To what extent and in what ways do NGOs in this field interact with and use external expert advice, including researchers and consultancies
- How important is *Norwegian* research and expertise in these contexts?
- To what extent are NGOs aware of and use development research funded by RCN research programmes in the area?

6.1 Approach and informants

In concrete terms, we have interviewed international programme managers in ten Norwegian based development aid organisations. The interviewees belonged to the following organisations which all received a major 2015-allowance from the Norwegian Agency for Development Cooperation (NORAD), including:

- Care Norge
- Norwegian Development Aid Fund (Utviklingsfondet)
- Norwegian Refugee Council (Flyktningshjelpen)
- Norwegian Church Aid (Kirkens Nødhjelp)
- Norwegian Red Cross (Norges Røde Kors)
- Norwegian People's Aid (Norsk Folkehjelp)

- Plan International Norway
- Save the Children Norway (Redd Barna),
- SOS Children's Villages (SOS Barnebyer)
- Strømme Foundation (Strømmestiftelsen).

These are all major Norwegian Civil Society Organisations (NGOs) on development aid in Norway²⁰. Several of these actors are also national units of large international organisations with units in many donor countries besides their operative activities in developing countries.

6.2 Use of external expert advice in the design of activities

Typically, one of our informants puts it this way, answering the question on use of experts outside his/her organisation in the design of long term programmes:

I would say we have very limited use of research – and capacity to absorb research-based knowledge – as far as I know. We engage in cooperation with other aid organizations that have a longer tradition for research, and even internal research capacity. (...). Our contact with researchers is limited to either strategic evaluations or partnerships with academic institutions. Apart from that we engage expert consultants in programme evaluations. (NGO10).

In many organisations, information is gathered and assessed from several different sources upon preparing for a decision on a new aid programme. These sources may include existing national/international development research along with local educational institutions, field partner institutions, advisory boards sometimes also including business representatives and academics. Only a couple of our NGO-informants report marginal contact with Norwegian researchers, like the following:

We have no contact with Norwegian researchers on development research. However, we engage with Norwegian researchers in our national/domestic programme here [health/social welfare programme in Norway].

Although most NGOs report some use of researchers as experts, their experience in such interactions varies. Some are quite experienced with such collaboration while others appear to be in an early phase of engaging with Norwegian researchers in the field. The following informants' statements reflect this latter group:

This is the first time we engage in a cooperation with researchers in Norway. We are most aware and would like to apply more external expertise including research, but seldom have the available funding. However presently, we have commissioned an external expert to conduct a literature review (...). We have also used an external consultant to improve a educational programme. Our international leader has a doctorate, and is eager to include research evidence in our planning. This is the direction we are heading now. Generally, we have a poor record for this until now.

Limited access to dedicated funding appears to be a key constraint for initiating and using research based evidence in Norwegian development aid organisations. Even though the interest is there, informants express that investments in research activities often lose when competing with pressing needs, for instance related to good sanitary and heating conditions in refugee camps.

²⁰ Five of these NGOs were also included in the Norad-commissioned report *A study of Monitoring and Evaluation in Six Norwegian Civil Society Organisations*, dated March 2013 by the Swedish consultancy Andante – tools for thinking AB.

Another informant says that their organisation previously had commissioned research-based evaluations. However, Norwegian researchers are no longer considered competitive for such assignments due to cheaper bids from Norwegian and international consultancies (NGO6).

A third obstacle mentioned, is the workload that is required when engaging in common projects and proposals with research organisations. One informant said they decided to withdraw from a joint RCN project proposal because they had difficulties in prioritising the time required for following up the process.

At the same time, another informant reported quite more effort and experience on research collaboration with Norwegian researchers, also including a substantial network project, paving the road to new guidelines with topical interest:

Our organisation has no overall strategy for cooperation with researchers, but the Norwegian branch has a growing collaboration with Noragric. We have taken part in a research programme funded by the MFA on climate change, which is intended to build a bridge to practitioners in the aid field. The idea which originated from Noragric, also engage research organisations in UK and Pakistan. Other aid organisations also contribute, and the intention is to create a larger network and a state of readiness on climate change (...) This collaboration has resulted in useful guidelines which will be helpful in responding to climate change disasters and will also definitively be communicated our organisation internationally.

Cooperation with the NMBU Noragric project is mentioned by several informants, primarily in relation to projects addressing climate change. In fact, this topic appears to be relevant for many aid organisations irrespective of their thematic or geographic orientation. Climate change issues are also seen as important in the planning of future aid projects.

Such common knowledge needs represent an exception to the traditional country- and cultural specific needs for knowledge in various aid organisations. Hence, this might be an area where several NGOs could join forces around the financing and organisation of network-organized projects. Such joint initiatives could also give rise to wider use of research-based knowledge in this area.

6.3 NGOs' use of Norwegian research

Turning to the use of strategic intelligence in general, we first asked the informants the following question: "Has Norwegian research made any difference to how you plan your organisations work?"

The general impression is that few NGOs make active and regular use of Norwegian development research in planning and performing their activities. But the picture is mixed.

For instance, one informant pointed out that research-based evaluations of their own activities had been of importance to the redesign of aid programmes. The evaluations had been conducted both by Norwegian research institutes and other international researchers. The informant stressed that the NGO is most interested in relevant (applicable) development research, preferably with room to interact with both Norwegian and international researchers in the field (NGO6).

Another informant could not mention any particularly important contributions of Norwegian development research to their activities. Instead, this NGO referred to the Comparative International Education Society (CIES) as a frequently source for strategic intelligence. Other informants referred to international consultancies as well as strategic intelligence received from their own organisation reference centres abroad.

Furthermore, two of our informants, pointed out that research-based knowledge may have other strategic uses for civil society organisation on development aid:

We can also make use of information on “what works” and on knowledge gaps on the local level. Every now and then we consult and discuss with researchers that we have established contact with. This usually gives us good arguments. We can probably make more use of research in our politically oriented work, and thus have more impact on Norwegian development policy.

We are using Norwegian researchers in our strategic work. They are important updating us on relevant issues and developments. They have also contributed to our main publication which is instrumental to our own organisational learning. We sometimes also engage them for evaluations. (...) We find that Norwegian development research is important to political debate on the developmental policies in Norway. (...). I find that a rich public debate is dependent upon researchers contributions to a large extent.

These statements indicate that NGOs most often seek for *applied research* for either i) design or redesign of aid programmes, ii) strategic development of aid organisation or iii) influencing national policies on development aid through political activities/lobbying.

6.4 Knowledge of and use of RCN-funded research projects

In terms of NGOs' use and awareness of RCN-programmes for development research, our respondents report generally limited use of such projects. Few of our respondents report that they have attended an RCN-conference on development research. Moreover, most of our NGO informants report little or no contact with the Research Council of Norway, and even fewer can mention any specific RCN-funded research projects. The only exception to this is the following NGO experience:

On invitation from one Norwegian research institute, we have recently joined a larger RCN funded project. This includes a follow up project in collaboration with a university in Niger to explore innovative ways to handle the school discontinuation/exit issues. This was based on a previous personal contact of one of our employees. Apart from this, our contact with researchers is mainly through informal dialogue at various conferences.

The specific project mentioned in the statement above, was granted from an ongoing innovation oriented programme named Visjon2030²¹ starting in 2017. While it is natural that NGOs are more familiar with recent and ongoing initiatives, one might have expected more knowledge about at least some of the past NCR-programmes from our portfolio for 1993-2013.

Further, when we asked NGOs explicitly to mention concrete RCN-programmes in the field of development research, several informants gave the impression that this was new territory to them. The usual answer was that for the moment they could not mention any RCN-funded project nor programme on development research. One NGO-informant said that he had used some information disseminated from an RCN-funded climate research project some time ago. Apart from this, this informant could not point to any specific RCN activities or publications. Another of our informants who had attended an RCN-conference on development research, had been involved in an innovation oriented project proposal submitted to the RCN which was turned down. Searching for knowledge of and possible use of development research funded by the RCN we also prompted the major ongoing NORGLOBAL programme, which did not however ring any bells for our informants²².

These findings appear somewhat surprising and disappointing in terms of the wider use of RCN-funded research in this domain. Yet, one should be careful not to generalize. Even though our respondents play a central role in their respective organisations, their answers should be read as indications, since our respondents do not answer on behalf of their entire organisation.

The main impression from our interviews can also reflect that NGOs in general have weak internal systems and traditions for building an institutional knowledge-base and keeping track of research findings from Norwegian development research. This means that although several NGOs may have individuals within their organisation with close contacts with researchers and research project, this knowledge does not seem to trickle down to the whole organisation ²³.

Furthermore, it seems that most international aid activities in these organisations are related to local demands for aid in the receiving countries. These demands are often registered and reported by the Norwegian NGO-partners in developing countries. Provided that there is sufficient time and resources available, external expert advice including research evidence can play a role in forming the NGOs' aid activities.

International and Norwegian consultancies are on the other hand important sources of information, operating within the relevant time scale to the NGOs needs. Part of the expert evidence requested, also originates from evaluation studies of previous aid programmes, provided both by consultancies and researchers in the development field.

This is important to keep in mind when analysing the use and potential impact of RCN research programmes on Norwegian development aid NGO's. From the outset, the chances that long-term RCN funded research should have a major impact on the NGO programme design and aid practice in general, are rather low, also due to the time-frame and other resources available to answer demands for aid. The international programme managers need expert advice for the assessment of the aid activities but cannot usually wait for a targeted research project to be completed. Therefore, their partner organisation in the field as well as the NGOs internal analytic capacities are more frequently the central information sources for the programme design of aid programmes.

6.5 Main findings

Among the ten NGO informants interviewed for this project, we find only a few examples of active and strategic use of research based knowledge in development aid organisations. Furthermore, hardly any of the NGO-informants seem to be familiar with RCN's programmes in this area.

This does not mean that development research is of little use to Norwegian NGOs in this area. On the contrary, our informants express a strong willingness to make better use of research as a basis for their activities. NGO-informants also stress the importance of maintaining a strong national research capacity in this area, not only for their own future use, but just as much for the role development researchers play in the public debate and policy making in this area. Hence, although NGOs seem to lack the absorptive capacity as organisations, there seems to be a clear potential for increased interaction between national NGOs and national researchers in the field of development research.

²³ We started informing about our interview study at the secretary general level, when recruiting our informants.

7 Impact on development studies

Higher education constitutes an important channel for the diffusion of research to society outside academia, in the sense that students acquire research-based knowledge that they bring with them and make use of in jobs in the public and private sectors, as well as on other societal arenas. Development studies is an established field within Norwegian higher education, which produces candidates for various types of employment – including positions in organisations working with development cooperation and aid, such as the Ministry of Foreign Affairs, Norad and national and international NGOs.

This raises the question of what role the portfolio of RCN-funded development research has played in educational provisions within this field, and thus in shaping the competence of candidates to central positions within the development aid system, and the knowledge based on development issues in society more generally.

7.1 Approach and case description

Many Norwegian higher education institutions (HEIs) offer development studies, in the form of specialised study programmes and/or courses within disciplinary and area specific study programmes. We lack a complete overview of all relevant programmes and courses, and our aim has not been to make a comprehensive study of the field. Instead, we have focused on gaining insight in the role of the Research Council portfolio of development research has played in educational provisions at the level of individual HEIs.

To do so, we have carried out case studies of the four state-owned HEIs that are currently offering bachelor programmes in development studies, cf. table 7.1 below. As the table shows, three of the four institutions also offer master programmes in the field, and these programmes are included in our case studies. This way, we cover specialised study programmes on both lower and higher degree. It should be noted, however, that several other HEIs offer specialised master-programmes in development studies, notably the universities in Bergen (UiB), Trondheim (NTNU) and Tromsø (UiT – the Arctic University of Norway).

Table 7.1: Higher education institutions with specialised study programmes in development studies on bachelor and master degree level

Institution	Bachelor level programmes	Master level programmes
Norwegian University of Life Sciences (NMBU)	International environment and development studies	<ul style="list-style-type: none"> • International development studies • International environment studies • International relations
Oslo and Akershus University College of Applied Sciences (HiOA)	Development studies	-
University of Agder (UiA)	Development studies	Global development and planning, with specialisation in <ul style="list-style-type: none"> • development management • planning and global forces of change
University of Oslo (UiO)	Development studies	Development, Environment and Cultural Change

Note: We have only included programmes with an explicit development studies profile. Programmes within areas such as global and international health and peace and conflict studies have been left out.

Source: Information on HEI web pages/Interviews with study programme leaders/ academic staff.

The case studies have been based on interviews with study programme leaders and academic staff with thorough knowledge of the historical development, organisation and curriculum of development studies at the respective HEIs²⁴

We have also interviewed the Ministry of Foreign Affairs to learn about the role that RCN-funded research has played in their trainee-programme (“Aspirantkurset”). Whilst not an academic study programme, the three-year MFA trainee programme trains candidates from the HEI sector for permanent positions in the Ministry and the Norwegian Foreign Services, and thus for positions with direct responsibility for i.a. implementing national policies for development cooperation and aid.

7.2 A brief overview of the study programmes

At the *Norwegian University of Life Sciences (NMBU)*, the Department of International Environment and Development Studies – Noragric – offers development studies on both bachelor, master and Ph.d. level. Noragric was established in the mid-1980s as an interdisciplinary centre, and is currently one of three departments in the Faculty of Social Sciences. An international master programme was established in 1986, and since the beginning of the 2000s, a bachelor programme and another two master programmes have been introduced. All the programmes are open to international students, and the courses are taught in English. Decisions on the course literature are largely made by the individual teachers/lecturers, whereas the responsibility for the overall contents and quality of the programmes lies with programme coordination teams made up of three members of the academic staff. The course literature includes textbooks and articles, on both bachelor and master level. Articles are considered particularly important, since textbooks tend to become outdated as the field of study evolves.

²⁴ Our original intention was to combine the interviews with an analysis of reading lists from the study programmes, in order to map the extent to which the institutions have made use of literature written by researchers with Research Council funding in the period 1994-2013. However, due to the complexity of academic and pedagogical considerations involved in developing reading lists, and the great variation in the form of such lists across courses, programmes and institutions, we concluded that it would be difficult to make any meaningful assessments and comparisons based on this type of analysis within the context of our study

Development studies at *Oslo and Akershus University College of Applied Sciences (HiOA)* go back to the 1980s, and the current bachelor programme was established in 2003. The programme belongs to the Department of International Studies and Interpreting at the Faculty of Education and International Studies, and draws on several disciplines within the social sciences. Reading lists are developed and revised by teaching staff responsible for the individual courses, and the literature consists of both textbooks and articles, written in Norwegian or English. Norwegian literature is given priority, and members of the academic staff have written a textbook in Norwegian based on their own research, which is used to introduce students to development studies in the first year.

The University of Oslo (UiO) has a bachelor programme in development studies offered by the Department of Sociology and Human Geography, and a master programme offered by the Centre for Development and the Environment (SUM).

The bachelor programme was established in 2003, and is a cross-disciplinary programme with courses delivered by four departments at the Faculty of Social Sciences. A programme council has the overall responsibility for developing and revising the curriculum, but the members of the academic staff teaching the courses have significant influence on the selection of course literature. The literature is mainly in English, and includes textbooks and articles. The key criteria for selecting literature is that it should be interesting, relevant and well-written.

The SUM centre at the University of Oslo is an interdisciplinary centre for development and environment studies that goes back to 1990. Their master programme was established in 2003, based on previous courses that were closely linked to the research of the academic staff. The programme combines development studies with social science and humanities perspectives on the environment. All courses are taught in English, and around half of the students are recruited internationally. The course literature consists mainly of articles, and is subject to continuous revisions based on developments in the research agenda.

The University of Agder (UiA) has offered a one-year programme in development studies since the 1980s. A bachelor programme was established in 2003, and a master programme in 2005. Both programmes are cross-disciplinary and belong to the Department of Global Development and Planning at the Faculty of Social Sciences. Master students can choose between two specialisations – one campus-based specialisation, and one Internet-based specialisation where all courses are in English. Members of the academic staff serve as programme coordinators. The course literature is selected based on the criteria of quality and relevance, and should preferably be in English. A combination of textbooks and articles are used on both bachelor and master level, but textbooks are generally more important on the bachelor level.

The trainee programme of the Ministry of Foreign Affairs (MFA) is, as pointed out above, not an academic study programme, but a practical training programme. Every year, around 15 trainees are admitted to the programme, based on a strong competition and a thorough selection process. The programme is designed to develop skills particularly relevant for working in the Norwegian Foreign Services. The programme consists of a combination of courses and practical studies, which take place at the MFA as well as at Norway's diplomatic missions abroad. Development policy is one of many areas covered, and the courses are based mainly on relevant policy documents and taught by MFA staff.

7.3 The role of RCN-funded research

All the four HEIs report that they have received funding for development research from the Research Council, but with large variations in volume and orientation. Data on project ownership indicates that UiO and NMBU have been among the leading institutions, whereas HiOA and UiA have played a more limited role. This is not surprising, and reflects differences in academic profiles and research traditions,

but it can be expected to have a bearing on the links between RCN-funded research and education on the institutional level.

The general picture that emerges from our interviews, is that development research funded by the Research Council has contributed significantly to the development and quality of study programmes in HEIs. While our informants stress that it is difficult to assess the significance of specific research programmes, they recognise indirect and direct links between RCN programmes and the education they offer within development studies. The links are described in further detail below.

For the MFA trainee programme, on the other hand, the links are weaker. Besides the fact that the courses are not limited to development-related issues, they are – as we have seen – based mainly on the competence of MFA staff and literature from the practical policy domain. This does not mean that development research plays no role at all – there has, for example, been shorter seminars with central researchers within the field, but generally. But generally, the role played by academic research seems to be limited and based on ad hoc initiatives.

7.3.1 Indirect links: Competence and capacity building

By supporting researcher recruitment and long-term competence building, the Research Council programmes are said to have contributed significantly to the development of strong research communities within development studies and thus for teaching capacity in the field. This indirect link between the RCN funded research and education has been especially important at UiO and NMBU, where the participation in Research Council programmes have been high.

At UiO, a large share of the teaching staff at both bachelor and master level has received funding from the programmes in question. The RCN programmes, and particularly large-scale, long-term programmes such as *Globalisation and Marginalisation: Multi- and Interdisciplinary Research on Development Paths in the South* (UTISØR) and *Independent projects within environment and development research* (REK-MU/FRIMUF), are highlighted as essential for teaching capacity. According to one of our informants, these programmes have constituted the most important link between RCN-funded research and education at bachelor level, since teaching on this level is based on a different logic than research.

Academic staff at Noragric at NMBU have been involved in several projects funded by the Research Council programmes for development research, including *Forced Migration, Resource Conflicts and Development* (TVUMIG), *Research on Poverty and Peace* (POVPEACE) and the UTISØR programme mentioned above. Our informant at NMBU maintains that funding from these programmes has been invaluable for the development of a strong academic environment and educational capacity at Noragric, and contributed greatly to the quality of the study programmes.

7.4 Direct links: Research-based education

Direct links between RCN-funded research and the study programmes in question should follow from the legal obligation of Norwegian HEIs to offer research-based education. The term is not clearly defined (see e.g. Kyvik and Vågan, 2014), but based on our interviews, the education offered within development studies can be considered as research-based in two ways. Firstly, the informants stress that those who teach are active researchers in the field and draw actively on their own research, e.g. through seminars or lectures, or choosing countries they have studied as destinations for students' field work. Second, the reading lists/curriculum consist of research literature – either in the form of textbooks, which are typically broad in scope and synthesise existing research-based knowledge, or scientific articles, which represent more specialised, in-depth and updated research.

It is generally difficult to distinguish research funded by the Research Council programmes from research funded by other sources, as the study programmes in question build on an extensive body of international literature. Yet, our interviews show that scientific articles from the RCN projects have

been used as course literature, and that the projects have also resulted in textbooks. Researchers at NMBU and UiO have, for example, produced textbooks based on RCN funded research that have been on the reading lists of their study programmes. The books have been replaced, though, because they have become outdated, which is held to be a general challenge with the use of textbooks.

Unsurprisingly, we find that the links between research and education are stronger at the master level than the bachelor level. Our informants point out that bachelor level courses often give a broad introduction to a topic, which means that the research of the teaching staff is not that relevant. For the same reason, textbooks tend to be more prevalent than scientific articles. At the master level, the courses are more specialised and those who teach can more easily draw on their own research. Furthermore, reading lists consist largely of scientific articles, and some students write their Master's thesis within the context of the research projects of the academic staff. At UiO, for example, where the Master programme offered by SUM is said to have very close links to research, the Master students are often actively involved in RCN funded projects.

7.5 Main findings

Our case studies show that the RCN-programmes for development research have been important for higher education within development studies in Norway – indirectly, by contributing to building and maintaining academic communities and thus teaching capacity in HEIs; and directly, by funding research that has been used actively in teaching and curriculum development.

At the same time, our informants express some concerns about the current and future situation. Some argue that RCN-funded development research is too “impact-oriented” to give students a critical intake to existing policy and practices. Others, who emphasise how the research contributes positively to higher education, worry that cuts in government funding for the Research Council programmes will in turn weaken the educational provisions within the field.

Hence, there seems to be conflicting interests between the claims from policy makers, civil servants and NGOs for more relevant research and Higher education institutions' concerns of maintaining long term and critical research as a foundation for the education of future candidates from development studies.

Furthermore, we observe that the MFA trainee programme for future diplomats makes little systematic use of academic research and researchers as part of the courses. If increasing absorptive capacity for R&D in MFA is an objective, the specialized trainee-programme may constitute an arena for raising the awareness of relevant research for future civil servants and diplomats in the field.

8 Broader societal impacts

The previous chapters have approached the impacts of development research through quantitative analyses and interviews with various users and stakeholders. In this chapter, we supplement these approaches with an analysis of so-called impact cases, where researchers, research groups and institutions describe concrete examples of how specific research efforts have led to concrete societal impact. The material is derived from a set of recent and ongoing evaluations of Norwegian research and consists of more than 500 cases, mainly within humanities and social science.

Among the central questions in the following are: To what extent are impacts in developing countries mentioned in the impact cases? What kind of impacts appear among the cases relevant for development perspectives? What are the main channels and pathways through which such impacts occur? To what extent are impact cases in development research referring to RCN as a funding source?

8.1 Main approach and data

The impact cases we analyse are part of four evaluations of Norwegian research groups and institutions, whereof one is finalized and published and the three others are still ongoing²⁵. Most of the material is therefore unpublished and made available here on the condition that individual cases are not exposed and described in detail. The analysis in this chapter is therefore mostly on an aggregate level. More specifically, the material consists of the following:

- 69 impact cases submitted to the evaluation of social science research institutes
- 165 impact cases submitted to the evaluation of research institutions and groups in humanities
- 234 impact cases submitted to the evaluation of research institutions and groups in social science
- 54 impact cases submitted to the evaluation of primary research institutes

All impact cases follow a standardized structure inspired from the British Research Excellence Framework (REF); with i) a short summary (100 words), ii) description of the research underpinning the impact iii) short description of the impact. In addition, all cases include relevant sources and references. For this analysis, we have carried out a manual reading/browsing of all case descriptions in search of cases where the intention and/or the reported impact of the research is relevant for developing countries, development aid and/or development policy, hereinafter referred to as

²⁵ This was the situation by May 2017

“development cases”. In so doing we have also based our selection on the definition of development research provided by RCN:

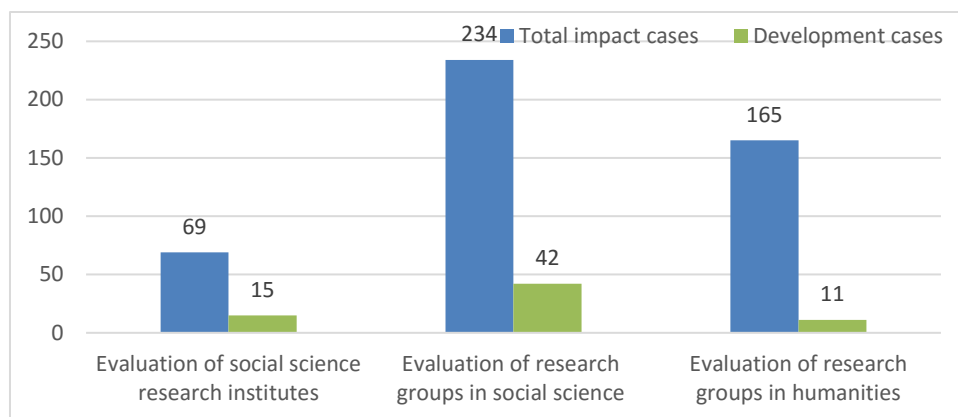
Research which is relevant for understanding interlinkages and transition processes on the global, national and local level, and can contribute to knowledge on the reduction of poverty, strengthening of human rights, and sustainable development.

8.2 Quantifying “development cases”

A first question is to what extent the impact cases submitted describe impacts that are relevant for developing countries? In exploring this dimension, two precautions are important: Firstly, one must bear in mind that so far only a limited part of Norwegian research institutions have been invited to submit impact cases. The number and share of development cases in this material is therefore not representative for the relative importance of all development research in Norway. Secondly, as development research is a relatively small and specialized field, one cannot expect all institutions to submit cases related to this field. On the contrary, it is more likely that research groups select cases from their core activities, and as shown in chapter 2, development research is rarely the main subject for research groups in Norway.

A similar mapping performed by the King’s College London identified 287 impact cases related to international development from a total sample of 6672 impact cases submitted to the 2014 edition of the British Research Excellence Framework (Hinrichs et al, 2015). The impact cases in this exercise covered all disciplines in UK higher education institutions, and the mapping indicates that it is unlikely to expect a large share of cases to relate to development issues. On this background, the figure below displays the number of impact cases submitted to each evaluation process and the number of development cases we have identified in Norway

Figure 8.1: Total submitted impact cases in social sciences and humanities and number of development cases. RCN-evaluations 2016/2017



Source: RCN/based on NIFU’s analysis

In general, it seems that the likeliness to submit development relevant cases is higher in Norway than in the British REF, of course bearing in mind that the two exercises differ substantially in terms of coverage and methodology. Compared with the total number of cases submitted, we find relatively few development cases within the evaluation of primary research institutes, while the presence of development relevant cases can be considered as rather high in humanities and particularly within social science.

8.2.1 Development cases in primary research institutes

The low number of development cases from primary research institutes is not surprising, since the seven primary research institutes subject to the evaluation have a clear mission related to the exploitation and management of *Norwegian* natural resources. Challenges related to developing countries and development policy are thus hardly mentioned among the 55 cases submitted. Two cases appear indirectly relevant for development issues as they deal with the interlinkages between climate change and global challenges, including a Global South perspective.

Although the primary research institutes have a clear national focus, it might be worth discussing whether there is an unexploited potential for relating more of this expertise to global challenges and developing countries.

8.2.2 Development cases in humanities

In the evaluation of humanities, we have distinguished 11 impact cases with a clear relevance and orientation towards development issues. In addition, we found a handful of cases with a more indirect relevance, several of which related to migration. Given that the R&D-statistics reveal few development oriented research units within humanities (see chapter 2), the number of development cases within humanities in Norway can be considered above expectations. Furthermore, the King's College exercise described above revealed relatively few development cases within Arts and Humanities.

Among the 11 selected development cases from Norwegian humanities research we find a handful dealing with Islam, Islamism and Jihadism as well as issues related to Middle East challenges. This is not surprising, given Norway's long term engagement in these issues. Otherwise, a variety of impacts appear from the cases in question, ranging from linguistic research which has raised the use and status of African languages in Zimbabwe to research on the reintegration of child soldiers in Uganda to impacts related to health and protection of cultural heritage in vulnerable areas. Apart from these observations, we consider the number of cases to be too small to draw conclusions on the types of development impact deriving from humanities research.

8.2.3 Development cases in social science

The overview in figure 8.1 indicates that impact cases submitted to the two social science evaluations appear to have the strongest occurrence of cases relevant for development issues. This finding confirms to a large extent the stronghold of social sciences that we derived from the R&D-statistical approach (chapter 2) and the bibliometrical approach (chapter 4). The same pattern also emerged from the broader analysis done by King's College in the British cases. Here, social science appeared with the largest share of cases, regardless of the sectors and topics the cases were related to (Hinrichs et al op. cit).

When we look at the submission of cases by sub units we find that almost all sub units which appear in the R&D statistics with a substantial share of development research, also have submitted one or several impact cases related to development issues. In addition, we find a number of such impact cases from units with little or no reporting of development research in R&D statistics. Furthermore, the internationally oriented social science research institutes all have several submitted development cases each, some even with all cases directly or indirectly related to develop countries. Hence, within social science, we find reason to say that the occurrence of impact cases related to development issues is beyond expectations.

It must be noted that there is a certain double counting in this area, as several cases submitted to the evaluation of social science research institutes also were submitted to the disciplinary evaluation of social science. But this does not alter the general conclusion that social science stands out with the largest share of development related impact cases. In the following we will therefore focus on the impact cases related to this discipline.

8.3 Social science impact cases: topics and pathways

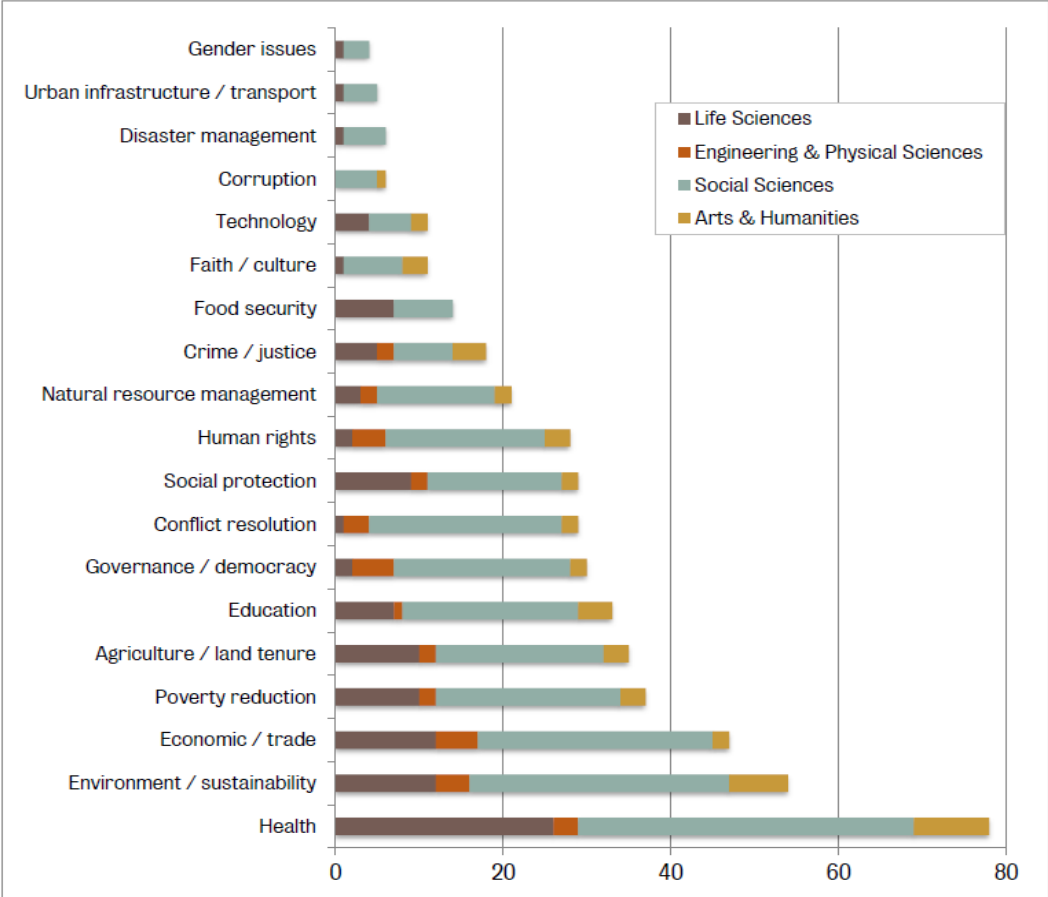
The narratives in each impact case provide concrete insight in the processes and pathways through which these impacts occur. Given the limited number of impact cases in the Norwegian material, we only give general descriptions of the main patterns that we derive from the material and not a full-fledged quantitative overview.

8.3.1 Main types of impact

Among the more than 40 social science impact cases related to development issues, we find a large variety in terms of the types of impact described. A number of cases also describe general impacts with no reference to particular topics and sectors for the impact. A general comment in many narratives is that “it is difficult to identify concrete societal impact of research in general and in social science in particular”.

For the sake of comparison, we use the King’s College typology of 19 topics of development research impacts applied on the British REF impact cases.

Figure 8.2: Profile of British impact cases related to development research. Number of cases by topic/sector and research discipline



Source: King’s College (op.cit.), based on REF 2014

According to this overview, British development cases are most frequently related to health issues, followed by environment/sustainability, trade and poverty reduction. Only a couple of cases seem to address issues related to gender, transport and corruption. It is interesting to note that the stronghold in health-related impact in the British material is not primarily related to life sciences and medicine, but also applies for other disciplines. In fact, most health-related impact cases in UK are submitted from social science research units.

Our analysis of the Norwegian social science impact cases reveals both similarities and differences compared to this British profile. Firstly, *health related impacts* are less emphasized in the Norwegian material, which is probably due to the fact that social science research related to global health in Norway is more present in medicine and life science disciplines, and these disciplines have so far not been invited to submit impact cases. The same is true for the topic *education*, as impact cases in educational science has not been part of the available material for this analysis.

Another striking difference is that gender issues is much more widespread in the Norwegian sample than in the UK impact cases. For instance, we find at least four cases where gender issues in developing countries is a main concern and even more cases where this perspective is indirectly relevant. The impact case example 1 highlighted below is a clear example of research with a concrete societal impact and a strong focus on the role of women, in this particular case related to women engaging in electricity provision in Kenya.

Furthermore, *human rights*, stands out as the topic which is most commonly linked to the Norwegian cases, while this perspective is less dominant in the British material. Compared with the British cases, we also observe that a larger share of Norwegian cases can be linked to the categories *faith/culture*, *natural resources* and *crime/justice*.

8.3.2 Main pathways to impact

Impact cases may also be used to get insight in the pathways and channels through which the impacts occur. Of course, these pathways may be difficult to capture as they vary from case to case. To illustrate this variety one can again refer to the British REF material, where a mapping done by the King's college identified more than 3700 unique pathways to impact among the nearly 7000 impact cases submitted²⁶.

In the analysis of our more limited Norwegian material we therefore look for general patterns instead of attempting to classify the whole variety of pathways. Through this approach, we clearly observe that the most important pathway to impact in this domain is through international policy reports and processes. We find a large number of cases which refer to citations and input to reports by the World Bank, UNESCO, FAO and WHO as well as other international organisations outside UN. These "cited impacts" often go along with oral presentations as well as advice and participation by individual researchers in international policy processes. Some researchers have even been actively involved in peace processes and conflict resolution in developing countries. The impact case example 3 from PRIO (see below) illustrates how such impacts may occur in practice.

Input to national foreign and development policy is also frequently mentioned, although less so than impacts on the international arena. Impacts on national policy is more frequently mentioned in the cases submitted by research institutes. In these cases, we also see numerous references to commissioned research. This confirms a general impression that Norwegian applied research institutes have closer ties, both formally and informally, with national policy makers than their colleagues in universities and university colleges. The impact case example 2 from CMI (see below) demonstrates how Norwegian development research can have concrete impact on policies, in this case taxation policies, in developing countries.

Furthermore, we find many references to cooperation with and impact on NGO's, which is somehow contrary to the relatively weak connections that appeared in our interviews with national NGOs (see chapter 6). However, most cases which mention impacts through NGOs refer to international NGOs and the units which operate in developing countries. Hence, this pattern indicates that Norwegian development researchers more frequently interact with NGOs on the international arena than with the units in Norway.

²⁶ <http://www.hefce.ac.uk/rsrch/REFimpact/>

Finally, dissemination of research through popular media and public debate appears as an important pathway to impact, although slightly less emphasized than one might expect given the findings from the evaluation of development research in 2007, where a number of users claimed that Norwegian development researchers were more oriented towards public debate and scholarly journals than the needs of users and stakeholders (RCN, 2007).

One possible explanation could be that impact cases ask for concrete *societal impact*, and such impacts are very difficult to identify as a result of researchers' engagement in the public debate. Hence, in the selection of impact cases there may be a bias towards concrete, demonstrable impacts instead of more general claims about "changing public opinion".

Impact case example 1: "SolarX"

Lack of access to stable energy provision is a major challenge for many developing countries. The project team behind "SolarX" has addressed the shortcomings of conventional strategies for electricity provision by studying alternative decentralized solutions and emerging transitions to solar power and other types of renewable energy. Several in-depth case studies on pioneering activities were carried out. In Kenya, the team developed and implemented a solar power supply in a cluster of villages in close cooperation with local villagers through action research.

The pilot project in Kenya has had an impact on the Kenyan local community and their perceptions of the capacity of women; it has also contributed to rising employment and education of women who are involved in the organization of electricity provision. Secondly, the project has had an impact on the Kenyan electricity sector, and 20 power plants have become diesel-solar hybrids, modelled after pilots developed under the research project. Thirdly, the project has led to joint learning processes and the creation of new networks that have enabled pioneering actors in Kenya to move forward with their work.

The impact on the Kenyan community was largely a result of the research strategies employed, and the close cooperation with local communities and practitioners. This includes hosting a series of workshops involving energy experts from Norway, India and Kenya, publishing a report for practitioners about the energy model and producing a documentary film. The project has been hosted by Department of Sociology and Human Geography at University of Oslo, and was led by Professor Karen O'Brien and Postdoctoral fellow Kirsten Ulsrud.

Impact case example 2: "Tax reform in Africa"

It is widely recognised that well-functioning revenue systems are a necessary condition for sustained and inclusive economic development. Research at the Christian Michelsen Institute (CMI) has had direct impact on tax policy and tax reforms in Africa over several years, e.g. by shaping the way governments and donors think about taxation and development.

CMI's work on this issue started in the early 1990s with a project for the Government of Tanzania. Since then, CMI researchers have addressed a wide range of issues on the political-economy of taxation and tax reform in a number of African countries. The projects have been implemented in collaboration with African partners and some with international organisations. For instance, the research showed that local tax systems in Tanzania often were distortive, costly to administer, and exacerbated inequity. Furthermore, evidence was found that administrative problems, corruption and political interference in tax policies often constitute bigger obstacles to increased revenue than lack of political will. These and other insights from the research have influenced policy and practice in Tanzania and raised awareness of important tax issues among the public. Research cooperation in these areas have also strengthened local research capacity.

CMI senior researcher Odd Helge Fjeldstad has been central in building up this research line.

Impact case example 3: “Conflict is development in reverse”

War is a major obstacle to development. The consequences of armed conflict are profound and far-reaching, and extend far beyond direct battlefield casualties. Over a long period, the Peace Research Institute Oslo (PRIO) has analyzed the effects of armed conflict on economic growth, women and children’s health, human rights abuses, and democratization. PRIO research has focused on three types of development consequences: economic, political and health. A central finding is that war, especially civil war, is a development issue. In this sense, war is both a consequence of lacking development, and a cause of it. PRIO’s research in this area has made a number of contributions to World Bank and UN reports. For instance, the 2011 *World Development Report* (WDR) included references to 23 different publications involving PRIO researchers. This report has also been referred to as a “game changer” which has altered the prioritization of conflict as a development issue. In this sense PRIO’s research has influenced the international policy agenda on development and conflict. One concrete manifestation of this change in focus is that conflict was placed at the centre of the agenda when world leaders reached a consensus regarding the new Sustainable Development Goals (SDGs), which replaced the Millennium Development Goals (MDGs).

PRIO’s research on the relationship between development and conflict represents a long-term effort and a general focus of the institute. Hence, a number of PRIO-researchers are and have been involved in the activities, amongst whom Research Professor Scott Gates appears as central researcher, together with researchers Håvard Strand, Håvard Nygård and Håvard Hegre.

8.4 The role of RCN-funding

A final question in this section is to what extent the impact cases that relate to development issues can be linked to support from RCN. Again, we limit our analysis to the impact cases submitted from social science research groups and institutions, as this material is larger and more representative than the other impact cases.

In order to capture references to RCN, we both look for specific references to RCN-support in the impact cases and check whether some of the researchers highlighted in the cases appear in our list of receivers of RCN-grants.

Through this approach we find that RCN-funding has played a role in a large share of the submitted cases in social science. In total, we find that 28 of 42 cases refer to support from one or several RCN-programmes, whereof 26 cases refer to a programme in the portfolio of development projects (see overview of programmes in chapter 1 and annex 1). Support from open, independent programmes (FRIMUF/REK-MU) are most frequently mentioned, which is not surprising since this support mechanism applies to most topics. We also find a number of references to NORGLOBAL, UTISØR and POVPEACE as well as the bilateral programmes for South Africa and India. It is difficult to say whether these contributions are above expectations, but the findings show that the support from a variety of RCN support mechanisms has contributed to a series of documented impacts from Norwegian development research. All the three impact cases highlighted above have received financing from RCN in various stages, and the central researchers involved in the cases also appear in our lists of grant receivers of RCN-funding.

8.5 Main findings

In this section, we have described patterns of broader impacts of Norwegian development research by exploring new material from impact cases submitted to recent and ongoing research evaluations. In general, we find that development research seems well represented among the impact cases

submitted from institutions and research groups within humanities and especially social science research.

Among the impact cases from social science *human rights*, stands out as the topic which is most apparent in the Norwegian cases. Compared with a similar although larger set of British impact cases, we also observe that Norwegian cases more frequently highlight impacts related *faith/culture* and *crime/justice*. Another striking feature is that gender issues appear to be much more widespread in the Norwegian sample than in the UK impact cases.

9 Conclusions and implications

A general impression from this study is that development research is widely used and applied in various settings, both in Norway and internationally. In many ways, this is not surprising given the fact that development research is in principle defined more by its application than by its methodological or disciplinary nature. At the same time our study reveals a number of general findings and questions which may have implications, both for this particular field of research and for research organisation in general. In this final chapter, we highlight some of these main questions.

9.1.1 *The contribution and added value of RCN*

A main purpose of this study has been to trace the impacts of development research financed by the Research Council of Norway (RCN). A general impression is that the programmes financed during the last 20 years have made substantial contributions to capacity building in Norwegian development research, both in terms of educating master students, training researchers and increasing scientific publication in the field.

It seems that researchers with RCN-funding from these programmes have a higher propensity to co-publish with researchers from developing countries, while at the same time their citation rates are well above world average and in line with Norway's total citation rates in social science. Most RCN-funded researchers have obtained positions in a broad range of research institutions and operate in a variety of disciplines. We have clear indications that RCN-funded researchers are heavily involved in teaching activities at development studies. Furthermore, those who have pursued non-academic careers, seem to have found relevant employment in other sectors. Finally, our analysis show that the "footprint" of RCN appears in the vast majority of reported impact cases related to social science development research.

Our interviews with various informants reveal few concrete opinions about the added value of the ten development research programmes in question. In many ways, this is not surprising since a number of programmes were operative in the 1990s and early 2000. For several informants, it is also unrealistic to expect detailed knowledge of particular RCN-programmes in this field. Nevertheless, for some informants, we find the awareness of the programmes to be below expectations. Hence, there might be a need to strengthen the visibility of future programmes and increase the involvement of stakeholders, for instance by including more NGOs in the programmes' steering boards.

Furthermore, one might consider to include more user oriented components in the programmes, in order to bridge the apparent gap between users and researchers and ensure that external users and stakeholders have a direct channel into the programmes without compromising the academic freedom and standards of the research activities.

Finally, we observe that the programmes have been financed mainly by the Ministry of Foreign Affairs (MFA) and the Ministry of Education and Research (MER). But given the broad agenda set by the commitment to the UN Sustainable Development Goals, it would be natural to engage also other sector ministries in the financing of future RCN-programmes in the field of development research.

9.1.2 Research at arm's length vs. research at hand

Another central question underpinning this study has been how to combine independent researcher initiated research with interaction and relevance for policy makers and practitioners in the field. This challenge was also raised in the 2007 evaluation of Norwegian development research, where the suggested solution was to provide more “arenas for interaction outside the funding arenas” (RCN, 2007).

Our study confirms that this is still a challenge, and particularly so for this field of research. On the one hand, we observe that a substantial share of development research is performed by a large number of small sub-units at different higher education institutions. On the other hand, core users such as the Ministry of Foreign Affairs (MFA), NORAD and NGOs seem to have little overview of the total array of research based expertise in the field. This is partly due to a traditional gap between the academic culture and the policy/practice culture, partly due to the particular staff rotation system in MFA, which makes it difficult to develop and maintain in-house user expertise in the main sector Ministry.

This situation is partly compensated for by some specialised and applied research institutes, notably internationally oriented social science research institutes, which seem able to combine high academic standards with close interaction with policy makers and other users. These actors are, however, dependent on competitive funding, which creates a need to establish a better system for balancing the need for strategic dialogue and advice with fair and transparent funding arrangements.

As a response to this, the evaluation from 2007 suggested “more arenas for interaction outside the funding arenas” (RCN, 2007). One concrete follow up of this could be to establish a so-called 21 strategy and forum devoted to development research, with a possible extension to foreign policy research. This would be in line with similar strategies in other fields of research in Norway. Although there is a certain tendency of inflation in such strategies in the Norwegian system, development research may in fact be one area where such initiatives could fill a real gap.

Based on our findings, we also see a need to establish more formal arenas for strategic dialogue *within* various funding arrangements. As mentioned above, minor user oriented components in RCN programmes could be considered as a solution. Such “pockets” of formalised user arrangements could fill the often “missing link” between the funders of programmes and the researchers involved, without compromising the main concerns of independent long term research and academic standards.

9.1.3 Researchers more useful than their research

The point raised above touches another general finding from this analysis, namely that most users seem to have more frequent and active use of *individual researchers* as experts and advisors than of their *research products* in terms of reports, scientific articles and other written outputs. Of course, these forms of use are closely connected. Personal meetings between researchers and users is often a way of disseminating research and raising users' awareness of existing reports and articles.

At the same time, the seemingly widespread use of “heads above papers”, entails a risk that too many users turn to the same group of experts and underexploit the variety of research and researchers within this area. For instance, several informants call for more targeted anthropological research towards developing countries, while both impact cases and R&D-data indicate that a relatively large number of anthropological institutes are active in development research. Likewise, we find that several impact cases describe research addressing broad and fundamental global challenges, while some informants say they miss research on such questions. Hence, we see a potential for users to engage with and make use of a broader expertise.

This also means that the academic environment should encourage their researchers to engage in dialogue with various users. Along the same reasoning, we see a need to recognise the importance of so-called “unconventional research careers”. Although this implies for the academic community in general, it might be particularly important that development researchers also have experience from other sectors, NGOs, international organisations and field work in the Global South. Our career tracking also indicates that most experienced senior researchers seem to gravitate towards academic careers at universities, while users seem most familiar with applied research institutes. A more reciprocal mobility pattern as well as increased cooperation between research institutes and universities would be a natural response to these challenges.

9.1.4 *Research is used in a reactive way – less often to set the agenda and suggest priorities*

While most informants express that research based knowledge is highly important and necessary in policy making and practice, it is striking that most examples of particularly valuable research refer to reviews of existing knowledge, evidence of “what works” and evaluations of previous strategies and projects. In our interviews with various users we came across few examples of research being initiated as a knowledge foundation for discussing and designing future priorities in the field. In short, our impression is that research in this field is used more in a reactive than in a prospective way. This strengthens the arguments above about the need for more arenas for strategic dialogue between researchers and users in this field of research.

9.1.5 *Methodological lessons and opportunities*

This study is also explorative in the sense that it has used new data and methodologies in combination with more established approaches. As studies of impact of research are gaining increased interest, it is worth sharing the experience of some of these approaches:

- One obvious conclusion from this study is that the impacts of cross-disciplinary fields of research, such as development research, cannot be measured through one single approach. Mixed methods are therefore required, both to capture the variety of impacts and pathways and to account for different framings of the thematic areas in question.
- Our study of publication patterns of development researchers revealed a number of interesting aspects, but suffered from the lack of clear linkages between funded projects and grants and the scientific publications related to these projects. In future studies, better data linkages would open the opportunities for better insight in the added value of particular programmes and portfolios of programmes. Likewise, better data and reporting of researchers’ contributions to the public debate would provide a better foundation for assessing and comparing non-academic publishing.
- Career tracking through register data appears to be a promising and hitherto underexploited method for tracing pathways to impact. Within this project, we have not had the time or resources to combine our aggregate register based analysis with thorough analysis of individual researchers. In future projects, it would be advisable to use register data to identify groups of researchers that are particularly interesting to follow, and then perform thorough tracing of their entire research careers based on bibliometrics, CV-analysis, social media and other approaches.
- Analyses of impact cases represent a new and interesting source of information on the impacts of Norwegian R&D. Although the British REF-material provides a valuable source of inspiration and comparison, the Norwegian material is so far too limited to perform similar quantitative text analysis, i.e. using text mining, topical analysis etc. Our qualitative screening of submitted Norwegian impact cases shows large variations, both in terms of their accuracy and how different research institutions and groups conceive the impacts of their research. Direct comparisons of cases is therefore not advisable.

10 Data and methodology

The complex nature of this study has required a combination of a variety of different data and methodologies, some of which represent novel and experimental approaches. These aspects are only briefly described in the analytical parts (chapter 2-8), while this chapter gives further descriptions of the data and methodologies we have used in this study.

10.1 Development research in R&D statistics

Norwegian R&D statistics are compiled in accordance with the international guidelines proposed by the OECD in the «Frascati Manual» (The Measurement of Scientific and Technological activities: Proposed Standard Practice for Surveys on Research and Experimental Development «Frascati Manual 2002», OECD 2002). A new and revised edition was published in October 2015.

In Norway, NIFU and Statistics Norway carry out the statistical surveys. NIFU is responsible for collecting, processing and disseminating statistics and indicators regarding the institute sector and the higher education sector, while Statistics Norway is responsible for the industrial sector. The data collection is done annually, but with a more comprehensive survey every second year.

In the regular R&D survey, respondents at department level are asked to report R&D activities by priority areas of national interest. Such policy priority areas have been included in the Norwegian R&D surveys for a long period of time. With changing Governments, the priorities have to some extent been altered. However, many areas have remained unchanged for many years, and some may have undergone only minor changes in definitions etc. Priority areas have distinguished between *Thematic priorities* and *Technological areas*. Until 2015, the thematic R&D priorities have been:

- Food
- Marine
- Maritime
- Health and health services
- Welfare
- Education
- Tourism
- Global challenges,

Development research is one of several sub-categories under Global challenges and includes R&D that may “contribute to reduction of poverty, peace, democracy and human rights and to build research capacity in developing countries”. Data derived from this definition and methodology has been used in chapter 2.

10.2 The Research Personnel Register

NIFU's Research Personnel Register (RPR) covers researchers/university graduated personnel that participate in R&D at Norwegian higher education institutions, as well as research institutes, health trusts and other institutions with R&D activity in the Government sector. The register is based on regularly reports from the institutions to NIFU and includes information on position, age, gender, educational background (ISCED level 7 and 8) and work place (institution/faculty/department/field of science). Only personnel with a job share of 40 percent or more are included in the register. The register is part of the national R&D-statistics.

The register was established in 1965, with data back to 1961. From 1977 the register is available in an electronic form, and is updated every second year until 2007. The register has been updated annually from 2007. The Research Personnel Register is an important source of data for statistics and research regarding gender balance and mainstreaming in academia, analysis of various disciplines and sectors, age structure, educational background and studies of the academic field and distribution by field of science, as well as recruitment analysis. The RPR is used for career tracking in chapter 3 in this report.

10.3 Bibliometric data and methodologies

The bibliometric analyses are based on two publication databases. One is the National Citation Report (NCR) for Norway which NIFU has purchased from Thomson Reuters. This database contains the bibliographic information for all Norwegian articles (articles with at least one Norwegian author address). Data for each paper include all author names, all addresses, article title, journal title, document type (article, review, editorial, etc.), field category, year by year and total citation counts and expected citation rates (based on the journal title, publication year and document type). The 2016 edition of NCR, with data covering 1981-2015 was used. The NCR database is a subset of the more well-known database Web of Science, based on the three citation indexes: Science Citation Expanded; Social Sciences Citation Index; and Arts & Humanities Citation Index. However, the NCR does not include two additional citation indexes of Web of Science: The Conference Proceedings Citation Index, and The Book citation index.

Although, the database in total covers more than 12,000 scientific journals, it does not have a complete coverage of the Norwegian publication output. In particular, the coverage is more limited for the humanities and many social science disciplines. This is due to the fact that the database does not cover book publishing, which plays an important role within these areas. Moreover, most journals indexed are international and English language, while national scholarly journals usually are not covered. Despite such limitations, the database can provide interesting information on various aspects concerning Norwegian and international research. *The Cristin database*

In addition to NCR, we have used the Cristin database. This is a bibliographic database which covers the higher education, institute and health sector in Norway. In the database, the scholarly and scientific journals are field classified according to a system consisting of approximately 80 categories, including one for development studies. The category includes 77 international, mainly English language journals,²⁷ addressing various topics with the field of development studies. Thus, based on these data it is possible to provide an overview of the Norwegian publication output within the field.

²⁷ The following journals are included: Africa, Africa Development, Africa Today, African Affairs, African Development Review, Asia Pacific Viewpoint, Central and Eastern European Migration Review, Consilience - The Journal of Sustainable Development, Current Conservation, Democratization, Development : Journal of the Society for International Development, Development and Change, Development in Practice, Development Policy Review, Development Southern Africa, Economic development and cultural change, Environment Systems and Decisions, Environmental Development, Ethiopian Journal of Development Research, European Journal of Development Research, Revista Europea de Estudios Latinoamericanos y del Caribe, Forum for Development Studies, Gender and Development, Global Networks, Globalizations, Human-Wildlife Conflicts, Revista iberoamericana de estudios de desarrollo, IDPR. International Development Planning Review, IDS Bulletin, Innovation and Development, International Journal of Ecology and Development, International Journal of Rural Management, International

Nevertheless, there are also limitations attached to the analysis based on Cristin data. First, the classification system does not encompass book publishing. As book publications (monographs and book chapters) are important publication types within development studies, the analysis covers a limited part of the scholarly and scientific publication output, only. Second, some articles which have a topic related to development studies may be published in journals which have not been classified within development studies. Third, the analysis covers publications primarily directed towards the scholarly community, but not other types of research disseminations. This needs to be taken into consideration when interpreting the results.

Despite such limitations, data from Cristin may yield interesting information on the national publication patterns within the field. Publication data are available in Cristin for the 5-year period 2011–15 and the analysis covers this period (2016 data are not yet available). In order to assess the publication output over a longer period, we have used publication data from NCR. However, not all the journals classified within development studies are indexed in the NCR. Thus, the analysis has even stronger limitations in terms of data coverage.²⁸

10.3.1 Analysis of reported output data (RCN-data)

As part of the assignment, RCN has prepared a file containing all the reported output data from the programmes. The file consists of various types of output. In addition to data on articles in scholarly and scientific journals, book chapters and monographs, other types of outputs are included, such as reports, newspaper articles, unpublished or submitted manuscripts, lectures etc. In total, more than 2000 items have been reported. Unfortunately, the quality of these submitted data is rather low and the data appear in an unstructured format. The process of standardizing, structuring and verifying these data would be very time consuming. Therefore, we have not been able to apply the data material for a systematic bibliometric analysis. Nevertheless, we present some overall statistics on the number of reported items. We believe this is of interest as the output can be directly linked to the programmes, although there may be elements of both over-reporting and under-reporting of items (for example when a researcher includes publications that are not directly linked to the funded project or forget to report publications).

Journal of Technology and Development Studies, International migration (Geneva. Print), International Migration Review, Journal of Agrarian Change, Journal of Civil Society, Journal of Contemporary Asia, Journal of Cultural Heritage Management and Sustainable Development, Journal of Developing Areas, Journal of Development Studies, Journal of International and Global Studies, Journal of International Development, Journal of Refugee Studies, Journal of Rural and Community Development, Journal of South Asian Development, Journal of Southern African Studies, Journal of Sustainable Development, Journal of the Asia Pacific Economy, Journal of Third World Studies, Land Use Policy, Latin American perspectives, Latin American Politics and Society, Latin American Research Review, OIDA International Journal of Sustainable Development, Oxford Development Studies, Progress in Development Studies, Public Administration and Development, QA: rivista dell'Associazione Rossi-Doria, Quarterly Journal of International Agriculture, Regional studies, Research in Rural Sociology and Development, Review of African Political Economy, Revue canadienne d'études du développement / Canadian Journal of Development Studies, Science vision, Social Scientist, Studies in comparative international development, Sustainable Development, The Journal of environment & development, The Journal of Modern African Studies, The World Bank Research Observer, Third World Quarterly, Transition, World Development

²⁸ The analysis is based on the following 37 journals with at least one Norwegian article during the period analyzed: AFRICA; AFRICAN AFFAIRS; APPROPRIATE TECHNOLOGY; ASIA PACIFIC VIEWPOINT; DEMOCRATIZATION; DEVELOPMENT AND CHANGE; DEVELOPMENT POLICY REVIEW; DEVELOPMENT SOUTHERN AFRICA; ECONOMIC DEVELOPMENT AND CULTURAL CHANGE; EUROPEAN JOURNAL OF DEVELOPMENT RESEARCH; GLOBAL NETWORKS-A JOURNAL OF TRANSNATIONAL AFFAIRS; GLOBALIZATIONS; IDS BULLETIN-INSTITUTE OF DEVELOPMENT STUDIES; INTERNATIONAL DEVELOPMENT PLANNING REVIEW; INTERNATIONAL MIGRATION; INTERNATIONAL MIGRATION REVIEW; JOURNAL OF AGRARIAN CHANGE; JOURNAL OF CONTEMPORARY ASIA; JOURNAL OF DEVELOPMENT STUDIES; JOURNAL OF ENVIRONMENT & DEVELOPMENT; JOURNAL OF INTERNATIONAL DEVELOPMENT; JOURNAL OF MODERN AFRICAN STUDIES; JOURNAL OF REFUGEE STUDIES; JOURNAL OF SOUTHERN AFRICAN STUDIES; LAND USE POLICY; LATIN AMERICAN PERSPECTIVES; LATIN AMERICAN POLITICS AND SOCIETY; LATIN AMERICAN RESEARCH REVIEW; PROGRESS IN DEVELOPMENT STUDIES; PUBLIC ADMINISTRATION AND DEVELOPMENT; REGIONAL STUDIES; REVIEW OF AFRICAN POLITICAL ECONOMY; REVUE CANADIENNE D ETUDES DU DEVELOPPEMENT-CANADIAN JOURNAL OF DEVELOPMENT STUDIES; STUDIES IN COMPARATIVE INTERNATIONAL DEVELOPMENT; SUSTAINABLE DEVELOPMENT; THIRD WORLD QUARTERLY; WORLD DEVELOPMENT.

10.3.2 Publication analysis, PhD students and post docs ethods

For the publication analysis of the funded researchers (Chapter 4.4), we have applied the NCR database, described previously. Although it would have been preferable to obtain data on the complete publication record of the persons, this has not been possible due to the lack of systematic bibliographic data. Therefore, the analysis has similar limitations as for the other analyses based on the NCR database. At the level of individuals, the coverage is unevenly distributed. The publication output of researchers who mainly or entirely publish in books is poorly covered. Others, particularly those within the natural sciences and medicine, will have most of their scientific publications included. This has to be taken into account when interpreting the figures. Despite limitations, we believe that the analysis may provide interesting information on the impact of the RCN programmes.

The analysis is carried out through several steps. First, we searched for publications in the NCR-database based on the list of names who have obtained PhD or postdoctoral fellowship through the programmes. All publications from the first year of funding until 2015 were included. Then various analyses were carried out based on the subset of publications. In total, the analysis encompasses 199 people. Of these, 7 individuals were excluded from the analysis due to homonym problems (two or more people with the same name, causing problems when retrieving publications based on author name searches).

10.4 Organbasen – Norway’s register on public committees and councils

To observe the participation of researchers on public committees and councils, we have done a thorough search in “Organbasen”, which is a database organized under the Ministry of Local Government and Modernisation. The appointment of members to public committees and councils are published in Organbasen to inform the public on the activities of committees and councils under the Government. The database is searchable, and updated annually since 2001. Before 2001, activities of committees and councils were published in White papers to the Storting. These White papers were published less frequently, and committees and councils from some years are therefore not traceable in the White papers.

The point of departure of the search was the complete list of project leaders awarded with projects under the included programmes for developmental research. Each hit was registered in a separate file, which formed the basis for an outline of project leaders’ participation on public committees and councils. Additionally, secretaries of the committees and researchers who were invited to give talks to the committees were registered. While secretaries and invited researchers do not take part on the decision making in committees, they may inform the knowledge base of the committee reports. Finally, the reference lists of the reports produced by the committees were examined to detect possible references to scientific publications published as part of the awarded projects.

10.5 Interviews with civil servants in charge of Government White papers

In order to shed light on the roles of research in the processes of writing Government White papers, we interviewed seven civil servants who have been editors /coordinators of the process of writing White papers in the Ministry of Foreign Affairs. Three of the civil servants were identified by our contact person in the Ministry. The others were identified through the snowball method. Several of the civil servants had contributed to different White papers, and in total, they reported on the processes of nine different White papers on development-related issues published by

the MFA, issued in the period from 2003 until 2016²⁹. Although the interviews do not give a comprehensive account of the use of research in the processes of writing White papers, they provide valuable first-hand experience on how research and researchers are used in these processes.

The interviews were semi-structured and were conducted either by phone or face-to-face in the offices of the MFA. Most interviews lasted for about an hour. Questions covered issues such as the organization of the process of writing reports; how they identified relevant information; the extent to which they were in contact with researchers throughout the process and through which channels; how research was seen as useful; which researchers and/or research communities they made contact with; and why they possibly did not seek out research. They were also questioned about their knowledge of the RCN programmes, and the degree to which they believed that the research conducted under the programmes had been made use of in policy making processes.

²⁹ These were: Meld. St. 24 (2016–2017) Felles ansvar for felles fremtid — Bærekraftsmålene og norsk utviklingspolitikk; Meld. St. 35 (2014–2015) - Sammen om jobben: Næringsutvikling innenfor utviklingssamarbeidet; Meld. St. 10 (2014-2015) - Muligheter for alle – menneskerettighetene som mål og middel i utenriks- og utviklingspolitikken; Meld. St. 25 (2013–2014) - Utdanning for utvikling; Meld. St. 25 (2012–2013) - Dele for å skape; Meld. St. 14 (2010 – 2011) - Mot en grønnere utvikling; St.meld. nr. 40 (2008-2009) - Norsk humanitær politikk; St.meld. nr. 13 (2008-2009) - Klima, konflikt og kapital; St.meld. nr. 35 (2003-2004) - Felles kamp mot fattigdom

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Appendix 1: RCN programmes within development research

As briefly pointed out in chapter 1, the development research programme portfolio of RCN consists of three main types of programmes. In this appendix, we provide more detailed information about the programme types and the particular programmes in question:

1. Thematic programmes

The thematic programmes have mainly received funding from the Ministry of Foreign Affairs/Norad and the development aid budget. The Ministry of Education and Research has contributed with additional funding in most cases, and the programme *Fisheries in Developing Countries* (U-FISK) also received some funding from the Ministry of Fisheries. The funding from the Ministry of Fisheries was minimal however, amounting to only 0.6 million Norwegian kroner of the total budget of 28.2 million.

Generally, the programmes have focused on themes that have been central in Norwegian development policy. The correspondence between the priority areas in national development policy and the thematic orientation of the development research supported by the Research Council has historically been very strong, reflecting the role of the MFA as the responsible sector ministry and large funding source, and the explicit ambition of the Ministry to provide funding for research from an “applied user perspective”.³⁰

Up until the late 1990s, the thematic programmes were relatively narrowly defined, but the establishment of *Globalisation and Marginalisation: Multi- and Interdisciplinary Research on Development Paths in the South* (UTISØR) marked a shift towards larger programmes with a broader thematic scope. The programme supported research within six thematic fields, and included several sub-programmes and activities with a total budget of 170 million kroner over a ten years’ period (1998-2007).

UTISØR was succeeded by a new large-scale programme, *Norway – A Global Partner* (NORGLOBAL), which ran from 2008 to 2013 with a total budget of 355 million kroner.³¹ Like UTISØR, NORGLOBAL included several sub-programmes and activities, and a key strategic objective was to make Norwegian development research more coherent by consolidating much of the efforts in one single programme. The broader set-up of NORGLOBAL was also a direct response to critical remarks in the evaluation of development research in 2007, where the lack of room for independent, researcher-initiated projects was found to be one area of improvement. Coherence was also to be achieved by cooperation and joint calls with other programmes in the Research Council.³²

The specific goals and priorities of the individual programmes vary, but generally there have been two central and closely interrelated objectives. One has been to promote long-term competence building and the development of strong Norwegian research communities within the defined thematic areas, by providing funding for Ph.D. and Post.doc. fellowships, research cooperation and networking activities. In line with this objective, research projects have been expected to contribute to researcher recruitment, high quality research published in peer reviewed journals, and participation in national and international academic networks.

The other objective has been to develop a stronger knowledge-base for policy makers, administrative agencies and aid organisations, nationally as well as internationally, and thereby contribute to better policy and practice within development cooperation and aid. To achieve this objective, there has been an emphasis on the dissemination of research results to user groups, including the Ministry of Foreign Affairs, Norad, Norwegian and international aid organisations, relevant actors in the Global South, and

³⁰ Stokke, Olav, «Utviklingsforskningen i Norge gjennom 50 år: Rammvilkår, diskurs og praksis», *Internasjonal politikk*, No. 4, 2010

³¹ The programme has been continued for a second period, NORGLOBAL – 2 (2016-2024).

³² *Norway – A Global Partner*, Work programme, 2009-2013

– in some cases – the general public. It has in this context been stressed that the dissemination should take forms that enable the user groups to understand and make practical use of the research.

It can be noted that building research capacity in developing countries through collaboration between Norwegian researchers and researchers/research institutions in the Global South has been a key objective in the more recent large-scale NORGLOBAL programme.

2. Programmes for bilateral research cooperation

The ongoing SANCOOP and INDNOR programmes target research cooperation with South Africa and India respectively, both priority partner countries for Norwegian research. Each programme receives funding from the Ministry of Foreign Affairs in Norway and government sources in the partner country, and the main objective is in both cases to strengthen bilateral research cooperation through joint projects and initiatives.

SANCOOP – *The South Africa – Norway Programme on Research Cooperation* started up in 2001 as a joint bilateral initiative, and is currently in its third phase. While building research capacity and contributing to redress in South Africa has been an explicit goal, the programme has a strong focus on promoting research excellence and relevance within thematic areas of mutual interest based on equal partnerships. The thematic priorities have changed over time, and currently include the environment, the climate system, climate change impacts on society and mitigation (including energy). Enhancing knowledge-based policies for sustainable development in the area of environment, climate change and clean energy in both Norway and South Africa has been a central objective in the third phase of the programme.

INDNOR - *The Norwegian Programme for Research Cooperation with India* was established in 2010 and is based on the Norwegian Government's India strategy³³. Central goals are to establish cooperation on research funding with the Indian government, and develop research cooperation with Indian actors through other research programmes in the Research Council and relevant Nordic and EU initiatives. The programme has five thematic priority areas: international political issues; climate; the environment; clean energy; and social development; and supports Norwegian-Indian cooperation within these areas encompassing basic research, applied research and innovation, and involving both research institutions and industry.

From a development research perspective, it can be argued that these two programmes represent "hybrids" that combine the objective of promoting research on and for development in countries in the Global South, with the objective of strengthening Norwegian research cooperation with two priority partner countries. South Africa and India are emerging economies with many strong research communities that represent strategically important partners for Norwegian research institutions and industry, and the joint projects are expected to contribute to research of high quality and relevance within thematic areas that are not limited to development research.

3. Independent researcher-initiated projects

The Research Council supports independent researcher-initiated projects through an open competitive arena covering research within all scientific fields. The *Independent projects scheme* (FRIPRO) is funded by the Ministry of Education and Research, and the main objective is to promote Norwegian research of high scientific quality. Support is awarded to both established and young researchers, with scientific merit as the main criterion.

The FRIPRO scheme has been in place for many years, with changing administrative and funding procedures. Up until 2012 *environment and development research* was a separate category with

³³ *Opportunities in diversity. The Norwegian Government's strategy for cooperation between Norway and India*, URL (29.03.2017): https://www.regjeringen.no/globalassets/upload/UD/Vedlegg/Utvikling/Indiastrategi_Norsk_engelsk_endelig.pdf

earmarked funding [(referred to as REK-MU, and later FRIMUF)], and a total of 185.7 million Norwegian kroner was allocated to research projects and personal Ph.D. and post-doc. fellowships within this category in the period 1993-2011. Unlike the other programmes covered by this study, there were no thematic or geographical limitations, but priority was given to projects that combined environment and development perspectives, contributed to methodological development within cross- and multidisciplinary research and/or strengthened the knowledge base for sustainable development in less developed countries as well as on the global level.

Since 2012, there has been a reduction in the number of disciplinary and subject-specific categories of research with earmarked funding in FRIPRO, and development research has been included in the broader categories of – first, *the social sciences* – and from 2013, *the humanities and social sciences*.

1. *The multilateral system in the field of development (MULTI)*

Programme period
1994-2005 <ul style="list-style-type: none"> • MULTI I: 1994-1998 • MULTI II: 1998-2005
Budget/funding source
ca. NOK 46 mill (Ministry of Foreign Affairs) <ul style="list-style-type: none"> • MULTI I: ca. NOK 16 mill • MULTI II: ca. NOK 30 mill
Main goal(s)
<ul style="list-style-type: none"> • increase knowledge about the role, function, operations, and processes of the multilateral system in the field of development • strengthen the understanding of multilateral organisations as a system and the development of theory • contribute to <ul style="list-style-type: none"> - free, critical research - the establishment of viable and competent research groups - a stronger knowledge base for the development of a more integrated policy for the South
Sub-goals/priorities
<ul style="list-style-type: none"> • increase knowledge within the following thematic areas: <ul style="list-style-type: none"> - process dynamics and arena function, in historical and contemporary perspective - the multilateral system as a tool for steering and regulation - the multilateral system and cross-cutting issues – political and economic framework conditions for development, poverty reduction, environmental questions and the management of natural resources, capacity development and institution-building, human resource development, gender roles and equality - human rights, democratisation, conflict resolution, reconciliation • social science research
Supported activities/types of funding
<ul style="list-style-type: none"> • research projects • Master, Ph.D. and post-doc. scholarships • international cooperation (required) • cross-project cooperation and seminars • conferences
Source(s)
Programme plan, RCN Programme action plan, RCN Final programme report, RCN

2. Forced Migration, Resource Conflicts and Development (TVUMIG)

Programme period
1996-2001
In 1999, the programme became part of <i>Globalisation and Marginalisation: Multi- and interdisciplinary research on development paths in the South</i> (see presentation below).
Budget/funding source
ca. NOK 18.5 mill (Ministry of Foreign Affairs, Ministry of Education and Research)
Main goal(s)
<ul style="list-style-type: none"> • build knowledge and maintain research competence in Norwegian academic institutions on causes and consequences of internal and external flight and forced migration • achieve improved, knowledge-based decisions among Norwegian authorities and Norwegian and international aid organisations
Sub-goals/priorities
<ul style="list-style-type: none"> • knowledge and competence building within the following areas: <ul style="list-style-type: none"> - theoretical and methodological issues - the role of conflict - response mechanisms • social science research
Supported activities/types of funding
<ul style="list-style-type: none"> • research projects • Ph.D. and postdoctoral scholarships • seed/network funding to research groups • visiting scholars • international fieldwork and collaboration
Source(s)
Final programme report, RCN Programme plan <i>Globalisation and Marginalisation: Multi- and interdisciplinary research on development paths in the South</i> , RCN

3. Fisheries in Developing Countries (U-FISK)

Programme period
1996-2002
Budget/funding source
NOK 28.2 mill (NOK 25 mill from the Ministry of Foreign Affairs, NOK 2.6 mill from the Ministry of Education and Research, NOK 0.6 mill from the Ministry of Fisheries)
Main goal(s)
<ul style="list-style-type: none"> • increase knowledge about fishery resources/aquatic, biological resources to ensure long-term sustainable exploitation of fish as food and viable fishing communities in developing countries • competence development within fisheries management in developing countries and generation of knowledge about connections between fisheries and viable communities
Sub-goals/priorities
<ul style="list-style-type: none"> • competence development in research institutions and administrative agencies, in Norway and developing countries • integration of development perspectives in established fishery research communities • research on priority countries and regions in Norwegian development cooperation • social science and multi- and interdisciplinary research
Supported activities
<ul style="list-style-type: none"> • research projects • Ph.D. and post-doctoral scholarships
Source(s)
Final programme report, RCN

4. *Globalisation and Marginalisation: Multi- and Interdisciplinary Research on Development Paths in the South (UTISØR)*

Programme period
1998-2007
Budget/funding source
ca. NOK 170 mill (Ministry of Foreign Affairs, Ministry of Education and Research)
The budget covers several sub-programmes and -activities, including <i>Forced Migration, Resource Conflicts and Development</i> (from 1999) and a programme on <i>Development economy</i> with an annual budget of 0.5 mill in the period 1999-2007.
Main goal(s)
build and maintain expertise on development paths in the South and stimulate critical public debate to help shape an integrated policy towards the South and international development co-operation
Sub-goals/priorities
<ul style="list-style-type: none"> • encourage research within and across six thematic fields: <ul style="list-style-type: none"> - globalisation and marginalisation - poverty - economic policy and commercial and industrial development - political development, democracy, human rights and conflicts - health, education and population growth - environmental problems and resource management • research on the following sub-themes: <ul style="list-style-type: none"> - gender perspectives - the conditions and rights of children - urbanisation • research on aid, including studies of the effect of the activity of multilateral organisations • multi- and interdisciplinary research • develop research groups that function as national centres of expertise • national and international cooperation and networking • dissemination of research results
Supported activities/types of funding
<ul style="list-style-type: none"> • research projects • Ph.D. and post-doctoral scholarships • research networks, including network focal points • cooperation with international research institutions and multilateral organisations • dissemination and knowledge exchange
Source(s)
Programme plan, RCN Annual report 2001, RCN Action plan 2003, RCN <i>Development paths in the South: What are the results of 10 years of research?</i> , evaluation by the programme board, RCN, 2008

5. Consultative Group on International Agricultural Research (CGIAR) Fellowship Programme

Programme period
2000-2012 <ul style="list-style-type: none"> • CGIAR I: 2000-2006 • CGIAR II: 2007-2012 <p>From 2009, the CGIAR Fellowship Programme was organised as a sub-programme under <i>Norway – A Global Partner</i> (se presentation below).</p>
Budget/funding source
ca. NOK 22.3 mill (Ministry of Foreign Affairs) <ul style="list-style-type: none"> • CGIAR I: ca. NOK 10.3 mill • CGIAR II: ca. NOK 12 mill
Main goal(s)
<ul style="list-style-type: none"> • strengthen the quality and international orientation of Norwegian agricultural research • give Norwegian research groups access to results from international research
Sub-goals/priorities
Norwegian participation in the research centres run by CGIAR, a strategic cooperation between several countries and international organisations aimed at developing sustainable food production and poverty reduction
Supported activities/types of funding
personal grants to Norwegian researchers for visits to the CGIAR research centres
Source(s)
Application assessment guidelines for 2008-2010, RCN Work programme <i>Norway - A Global Partner</i> , RCN <i>Evaluation of Norwegian Development Research</i> , RCN, 2007

6. South Africa – Norway Programme on Research Cooperation (SANCOOP)

Programme period
2001- 2017 <ul style="list-style-type: none"> Phase 1: 2001-2005 Phase 2: 2006-2011 Phase 3: 2013 - 2017
Budget/funding source
The programme is a joint bilateral effort, with both Norwegian and South African funding. The total Norwegian budget is ca. NOK 110 mill (Ministry of Foreign Affairs). <ul style="list-style-type: none"> Phase 1: ca. NOK 30 mill Phase 2: ca. NOK 40 mill Phase 3: ca. NOK 40 mill
Main goal(s)
<ul style="list-style-type: none"> strengthen research cooperation between South Africa and Norway Phase I: <ul style="list-style-type: none"> promote research excellence and quality and enhance the understanding in fields of mutual concern and relevance joint research contributing to capacity development and redress in South Africa Phase II: <ul style="list-style-type: none"> achieve scientific excellence and relevance within selected thematic areas joint research contributing to capacity and competence building of researchers, racial and gender equality, and redress in South Africa Phase III: <ul style="list-style-type: none"> enhanced knowledge-based policies and decisions for sustainable development in the area of environment, climate change and clean energy in South Africa and Norway achieve scientific excellence, human capital development and relevance to the identified thematic areas while ensuring gender equality and redress for mutual benefit knowledge-based public awareness and debate
Sub-goals/priorities
<ul style="list-style-type: none"> joint projects that involve researchers from historically disadvantaged groups in South Africa women researchers multi- and interdisciplinary research Phase II: <ul style="list-style-type: none"> joint research within the following thematic areas: <ul style="list-style-type: none"> health and medical sciences HIV/AIDS information and communication technology environment communication and social change education energy other areas Phase III: <ul style="list-style-type: none"> environment climate system climate change impacts on society mitigation (including energy)
Supported activities/types of funding
joint research projects
Source(s)
<i>Review of the South Africa-Norway programme on research co-operation: Phase I and appraisal of phase II,</i> external review, RCN, 2005 Programme guidelines, phase II, RCN Final report, phase II, RCN Programme guidelines, phase III, RCN

7. Research on Poverty and Peace (POVPEACE)

Programme period
2005-2013
From 2009, POVPEACE was organised as a sub-programme under <i>Norway – A Global Partner</i> (see presentation below).
Budget/funding source
Ca. NOK 140 mill (NOK 133 mill from the Ministry of Foreign Affairs, NOK 6.9 mill the Ministry of Education and Research)
Main goal(s)
<ul style="list-style-type: none"> • improve the understanding of how to achieve poverty reduction and promote peace-building • achieve the highest international standards in Norwegian research on poverty and peace issues • increase collaboration between Norwegian researchers and research institutions and expand networking and cooperation with leading research institutions in the North and South as well as international organisations
Sub-goals/priorities
<ul style="list-style-type: none"> • strengthen research in two thematic areas: <ol style="list-style-type: none"> 1. Poverty and welfare, with the aim to improve the understanding of processes and mechanisms that lead to poverty and develop knowledge relevant to poverty reduction strategies 2. Violent conflict, peace and development, with a main focus on <ul style="list-style-type: none"> - the role of poverty, resource management, and developmental and modernising change in generating violent conflict - the developmental consequences of violent conflict - strategies for transitions out of violent conflict • research identifying gender problems, vulnerable groups and policy interventions • capacity building in Norwegian research institutions • strengthen theoretical and methodological approaches • interdisciplinary and comparative research • dissemination to the academic community, policy community and the general public
Supported activities/types of funding
<ul style="list-style-type: none"> • research projects, incl. Ph.D. and postdoctoral fellowships • network building • conferences and workshops • dissemination and dialogue with stakeholders, including development policy makers and administrators
Source(s)
Programme plan, RCN Action plan 2010-2011, RCN Work programme <i>Norway – A Global Partner</i> , RCN

8. Norway – A Global Partner (NORGLOBAL)

Programme period
2008-2013
Budget/funding source
NOK 355 mill (Ministry of Foreign Affairs, Ministry of Education and Research)
The budget covers several sub-programmes and -activities, including <i>Research on Poverty and Peace</i> and the <i>CGIAR Fellowship Programme</i> (both from 2009).
Some of the sub-programmes were implemented by means of joint calls with other RCN programmes.
Main goal(s)
<ul style="list-style-type: none"> strengthen research in Norway on development in developing countries, as well as ensure an effective, flexible, visible and coherent organisation of this research by consolidating much of the effort within the field of development under a single programme, and through cooperation with other programmes strengthen research for development, through the integration of development perspectives into relevant programmes strengthen the research capacity of developing countries by enhancing research cooperation between researchers based at institutions in the countries in question and leading Norwegian research projects
Sub-goals/priorities
<p>the main goals of the sub-programmes/initiatives were:</p> <ul style="list-style-type: none"> <i>Research on Poverty and Peace</i> (POVPEACE): see separate presentation <i>Consultative Group on International Agricultural Research (CGIAR) Fellowship Programme</i>: see separate presentation <i>Research on Economic Growth, Poverty Reduction, Reproductive Health and Population Dynamics</i> (ECONPOP): to inform policy debates centring on economic growth and poverty reduction in low-income countries about the role of reproductive health and population dynamics, with emphasis on the essential role of gender equality and women empowerment in this process (in cooperation with the William and Flora Hewlett Foundation) the Research Networks: to enhance contacts between researchers and users through thematic and geographical networks (Comparative Research Programme on Poverty, CROP; the Network for Asian Studies; the Network for African Studies; the Childwatch International Research Network) globalisation of environment, energy and climate research: to strengthen the global dimension in these research areas and increase the opportunities for researchers from developing countries to participate in research on these issues (calls for proposals in cooperation between NORGLOBAL and other RCN programmes, such as NORKLIMA, RENERGI and MILJØ 2015) research on women and gender: capacity building in the South through increased participation by women researchers and greater focus on thematic areas related to women's issues (calls for proposals in cooperation with other RCN programmes) research on the impact of development cooperation: increased knowledge on the impact of Norwegian investments in development assistance
Supported activities/types of funding
<ul style="list-style-type: none"> research projects Ph.D. education researcher mobility research networks
Source(s)
Work programme, RCN

9. *The Norwegian Programme for Research Cooperation with India (INDNOR)*

Programme period
2010-2019
Budget/funding source
The programme receives funding from the governments of Norway and India. The total Norwegian budget is NOK 205 mill from the Ministry of Foreign Affairs and the Norwegian Embassy to Dehli.
Main goal(s)
<ul style="list-style-type: none"> • strengthen bilateral research cooperation with India • establish binding cooperation on research funding with the Indian governmental research funding bodies in collaboration with relevant thematic research programmes and scientific activities at the Research Council • continue to foster relations with India through cooperation with EU and Nordic countries as well as multilateral organisations in which India and Norway are partners • implement capacity-building, dissemination and promote the establishment of new research cooperation between India and Norway • lay the foundation for cooperation with India in all thematic areas and scientific fields, encompassing basic research, applied research and innovation, and involving research institutions and trade and industry in both countries
Sub-goals/priorities
<p>thematic priority areas[*]:</p> <ul style="list-style-type: none"> • international political issues • climate • the environment • clean energy • social development <p>[*] at the time the programme was established. The programme is open for incorporating new priority areas. Activities within the thematic priority areas are carried out in cooperation with other relevant thematic research programmes in the Research Council.</p>
Supported activities/types of funding
<ul style="list-style-type: none"> • research projects • capacity-building in Norway and India, including Ph.D. and postdoctoral fellowships • dissemination, communication and learning across research areas and programmes and between researchers and users
Source(s)
Work programme, RCN

10. *Independent projects within environment and development research (REK-MU/FRIMUF)*

Programme period
Up until 2012, environment and development research received earmarked funding through Independent projects (FRIPRO), which is the Research Council's open competitive arena for independent research across all scientific fields. The number of subject-specific and disciplinary fields with earmarked funding was reduced in 2012, and environment and development research became integrated into the broader field of social sciences (from 2013, humanities and social sciences).
Budget/funding source
1993-2011: NOK 185.7 mill (Ministry of Education and Research)
Main goal(s)
promote scientific quality
Sub-goals/priorities
<ul style="list-style-type: none"> • research combining environment and development perspectives • development of methodology in cross- and multidisciplinary research • international mobility/research cooperation
Supported activities/types of funding
<ul style="list-style-type: none"> • research projects • Ph.D. scholarships • post-doc. scholarships
Source(s)
<p>Call for proposals, RCN, 2009-2011 (Independent projects – Environment and Development research, FRIMUF)</p> <p>Action plan 2003-2004, RCN (Support for independent projects and recruitment within environment and development research, REK-MU)</p>

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