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# Evaluation of the Quota Scheme 2001-2012

Assessing impact in higher education and development



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# Sammendrag

## Mål og metode for evalueringen

Formålet med denne evalueringen er å vurdere i hvilken grad kvoteordningen har oppnådd sine mål, hvor godt utformingen av ordningen støtter disse målene og om den representerer den mest kostnadseffektive måten å nå etablerte målsetninger på. Evalueringen dekker perioden 2001-2012.

Formålet med kvoteordningen er ifølge evalueringens mandat følgende:

*«Målsettingen med støtteordningen for studenter fra utviklingsland, land på Vest-Balkan, i Øst-Europa og i Sentral-Asia (kvoteordningen) er å bidra til kompetansebygging i mottakerland. Gjennom studentmobilitet til norske universiteter og høyskoler skal ordningen tilføre studenter kompetanse og samtidig bidra til å knytte institusjoner og næringsliv i mottakerlandene til det globale kunnskapssamfunn. Ordningen skal også bidra til å styrke norske institusjoners internasjonale samarbeid. Ordningen skal knyttes til institusjonelle strategier og søkes benyttet sammen med annet internasjonalt forsknings- og utdanningssamarbeid».*

Evalueringen benytter et konseptuelt rammeverk, inspirert av OECDs utviklingskomité (DAC), for å vurdere ordningens relevans, måloppnåelse og effektivitet. For å strukturere diskusjonen presenterer evalueringen i tillegg en tolkning av hvordan ordningens mål er knyttet aktiviteter og underliggende antakelser.

I lys av målenes kompleksitet og antallet interessenter kombinerer evalueringen flere kvalitative og kvantitative metoder. Effekter på utvikling diskuteres gjennom effekter på læring ved hjelp av kjente konseptuelle rammeverk for vurdering av læringsutbytte. Effekter på internasjonalisering diskuteres i lys av norske politiske mål om internasjonalisering og internasjonale tilnærminger til å måle resultater.

## Relevans: Sterkt rasjonale, men begrensninger i utformingen

Kvoteordningen er rettet mot reelle og relevante behov, både i utvikling og internasjonalisering. Imidlertid legger ordningens utforming noen begrensninger på relevans for begge målene.

Forskning viser at høyere utdanning ikke bare kommer den enkelte til gode, men også bidrar til å utvikle økonomien som helhet. Støtte til høyere utdanning er i økende grad sett på som avgjørende for økonomisk utvikling, først og fremst i form av å bygge opp universiteter og forskningskapasitet i utviklingsland. Å bygge institusjoner tar imidlertid tid. Universiteter i utviklingsland og fremvoksende økonomier mangler kapasitet til å håndtere den stadig høyere etterspørselen. Spesielt mangler de nødvendig kompetanse på master- og PhD-nivå til å kunne oppskalere utdannings- og forskningsaktivitet. Stipend rettet mot studenter fra utviklingsland og fremvoksende økonomier kan løse kapasitetsbehov i mellomtiden. Andre programmer internasjonalt bygger på lignende begrunnelse som kvoteordningen. Storbritannia har siden 1959 praktisert en stipendordning beslektet med kvoteordningen. I 2006 lanserte EU stipendmuligheter for studenter fra land utenfor EU, som en del av et bredere internasjonaliseringsprogram.

To svakheter i ordningens design kan begrense utviklingseffekter. For det første mangler kvoteordningen systematiske betraktninger av relevans for hjemmeinstitusjonene, hjemlandet og studentene selv. Norske institusjoner identifiserer hvilke fag og institutter som skal ta opp kvotestudenter. De trenger ikke involvere partnerinstitusjonene i sine prioriteringer. Partnerinstitusjonene er bekymret for mangelen på forutsigbarhet om hvilke muligheter deres studenter vil bli tilbudt, som igjen påvirker deres langsiktige planleggingsevne. For det andre er det ingen enhetlige rutiner ved partnerinstitusjonene for å informere og velge studenter som skal få dra

nytte av de mulighetene som tilbys. Denne mangelen på åpenhet kan begrense like muligheter blant studenter i utviklingsland.

Kvotordningen er ikke utformet for å løse konkrete problemstillinger knyttet til internasjonalisering. Norske universiteter og høyskoler er i økende grad gjenstand for et globalt kunnskapsmarked. Internasjonal eksponering og partnerskap med internasjonale institusjoner er avgjørende for å forbedre relevans og kvalitet på studier og forskning. Et program for å styrke internasjonalisering, og særlig internasjonalisering rettet mot utviklingsland, fremstår dermed som fornuftig.

Kvotordningen bygger imidlertid ikke eksplisitt opp under prioriterte internasjonaliseringstiltak ved norske universiteter og høyskoler. Kvotestudenter på campus kan bidra med noe, men med få studenter på hver institusjon er det usikkert hvor stor virkning tilstedeværelse alene har. Faktisk og betydelig integrering av nye perspektiver i faglige aktiviteter vil trolig kreve at partnerinstitusjonene involveres i utviklingen av skreddersydde grader, som fellesgrader og sandwich-programmer. Kvotordningen oppfordrer til slike tiltak i dag, men det er ikke et krav og har ikke oppstått i særlig grad.

Norske universiteter og høyskoler selv bruker ikke kvotordningen strategisk for ytterligere prioritere eller justere sine internasjonaliseringsstrategier. Kvotordningen kan supplere andre partnerskap og internasjonaliseringsarbeid, men blir ikke brukt strategisk på ledelsesnivå. Ordningen er stort sett drevet av engasjerte enkeltpersoner på instituttnivå.

#### Måloppnåelse: Betydelige utviklingseffekter, men begrensede effekter på internasjonalisering

Totalt sett er kvotordningen en populær ordning, både blant studenter og institusjoner. Ordningen har flere positive enn negative effekter, samtidig som

den har begrensede kostnader for de to gruppene. Dette er likevel ikke det samme som at ordningen har tilstrekkelige virkninger til å rettfærdiggjøre sin totale kostnad.

Kvotordningens utviklingseffekter er særlig i form av læringsutbytte. Siden 1994 har 4 545 studenter fullført minst én grad under ordningen. Av disse har 78,5 prosent (3 567 studenter) fullført en mastergrad, 11,2 prosent (507 studenter) fullført en doktorgrad og 10,4 prosent (471 studenter) fullført en bachelorgrad. Spørreundersøkelsen blant tidligere kvotestudenter viser at de har vært i stand til å få bedre jobber og gjøre det bedre i den jobben de har, som følge av graden de tok i Norge.

En høy andel av studentene vender tilbake til hjemlandet etter fullførte studier. Hjemreiseraten er over 70 prosent for studenter fra utviklingsland. Studenter fra land i Øst-Europa, på Vest-Balkan og i Sentral-Asia har lavere hjemreiserate. Andelen som reiser tilbake til hjemlandet er lavest blant de russiske studentene. Studenter fra Russland studerer også på et lavere nivå enn studenter fra utviklingsland og Kina. Andelen doktorgradsstudenter er også lavere blant studentene fra land i Øst-Europa, på Vest-Balkan og i Sentral-Asia, sammenliknet med dem fra utviklingsland.

Effekter på internasjonalisering er mer begrenset og Kvotordningens effekt på internasjonalisering har avtatt over tid. Intervju med norske universiteter og høyskoler gir begrensede påviselige effekter på deres aktiviteter og resultater innen internasjonalisering. I lys av Kunnskapsdepartementets uttalte prioriteringer for internasjonalisering og internasjonal litteratur på feltet kan tre dimensjoner trekkes frem som relevante mål på internasjonalisering:

- Integrering av internasjonale perspektiver på alle nivåer i utdanningen

- Økt forskningskvalitet
- Økt mangfold og internasjonalt perspektiv

*Integrering av internasjonale perspektiver:* I en tidligere fase bidro kvoteordningen til utvikling og etablering av kurs undervist på engelsk, som igjen bidro til å tiltrekke internasjonale studenter utenfor Kvoteordningen. De siste årene har imidlertid ikke Kvoteordningen i nevneverdig grad stimulert til etablering fellesgrader eller sandwich-programmer. Kvoteordningen dekker ikke kostnaden av å opprette eller utvikle denne typen grader og programmer. Nye eller tilpassede grader er heller ikke en betingelse for opptak av kvotestudenter. Slike konstellasjoner er også i noen tilfeller praktisk vanskelige å forene med ordningen, gitt dens begrensninger med tanke på hvor kort eller lenge en student har rett til å få støtte under ordningen og strenge regler knyttet til reise mellom Norge og studentenes hjemland.

Et viktig unntak er utviklingsorienterte studier, hvor kvotestudentene bidrar til kursenes relevans og nye perspektiver. Disse studiene inngår imidlertid også typisk i sterke partnerskap finansiert av andre programmer. Det er dermed vanskelig å isolere effekten av kvoteordningen utover at den er et nyttig supplement.

*Økt forskningskvalitet:* Forskningssamarbeid om internasjonale temaer og med kvoteland har økt i evalueringsperioden. Effektene er imidlertid høyere ved norske institusjoner som også dyrker bredere partnerskap. Intervjuene tyder på begrenset effekt av kvoteordningen på kvantitet og kvalitet på forskningen.

*Økt mangfold:* Mange av de norske utdanningsinstitusjonene peker på kvoteordningens betydning for mangfold ved utdanningsinstitusjonene. Men med studenter spredt over et stort antall institusjoner er slike kulturelle effekter sannsynligvis begrenset.

Kvoteordningens mål er i seg selv ikke motstridende men heller ikke nødvendigvis gjensidig forsterkende. Tiltak for å styrke ett mål kan styrke det andre, men det kreves flere endringer for å styrke internasjonaliseringseffektene enn utviklingseffektene. Relativt små endringer kan ha betydelig effekt på utviklingseffektene ved ordningen, som allerede er gode. Dersom kvoteordningen skal ha effekter på internasjonalisering må sannsynligvis langt større arbeid nedlegges i utvikling og tilpasning av studier og grader som en del av ordningen.

#### Effektivitet – misforhold mellom ansvar og innflytelse

Kvoteordningen fremstår i utgangspunktet som resurseffektiv i den forstand at administrative kostnader er begrenset. Ordningens administrative oppgaver ligger i hovedsak til eksisterende offentlige institusjoner og etater som Lånekassen og UDI. Det betyr at bevilgede midler i går uavkortet til studentene. Men integreringen av ordningens oppgaver i generelle offentlige tjenester skaper også en rigiditet og manglende fleksibilitet som gir noen uønskede effekter og skjulte kostnader.

For det første er det et misforhold mellom ansvar for og innflytelse på viktige beslutninger og prosesser. Senter for internasjonalisering av utdanning (SIU) har det overordnede administrative ansvaret, og er ansvarlig for å føre tilsyn med Kvoteordningen. De fleste beslutningene fattes imidlertid av andre institusjoner. Den generelle regelen om at kvotestudentene skal være en del av et institusjonelt samarbeid er ikke særlig strengt anvendt. Oppmuntring om fellesgrader og sandwich-programmer er ikke kun en oppfordring og har liten praktisk betydning. SIUs administrative rolle har tilsynelatende hatt begrenset effekt på å etablere koblinger og synergier mellom Kvoteordningen og andre programmer som SIU også administrerer. SIU tar heller ikke den endelige

avgjørelsen om opptak eller studiefinansiering. Faktisk kan studieplasser bli tildelt og studenter tatt opp uten en sikker studiefinansiering på plass. Den endelige beslutningen om finansiering er ofte tatt etter at studentene har kommet til Norge, noe som innebærer likviditetsproblemer og finansiell risiko for kvotestudentene.

For det andre fører strømlinjeformingen til rigiditeter som kan gå på tvers av kvotestudentenes spesielle behov. De offentlige enhetene som har ansvaret for å implementere kvoteordningen har mye bredere mandater og er ikke skreddersydd for kvoteordningens behov. Dette gjelder særlig Lånekassen. Blant annet er Kvoteordningen dårlig tilrettelagt for doktorgradsstudenter og utbetalingene lite hensiktsmessige for studenter fra utviklingsland med begrenset mulighet til å legge ut egne midler i forkant av utbetaling fra Lånekassen. Evalueringen stiller spesielt spørsmål om Lånekassen er godt nok rustet til å håndtere kvotestudentene.

For det tredje dekker finansiering gjennom kvoteordningen bare livsopphold for studentene. Det er ikke ressurser for å styrke institusjonelle partnerskap og etablering av skreddersyde programmer. Særlige midler til slikt arbeid ville sannsynligvis ha styrket internasjonaliseringsprosesser ved de norske institusjonene.

Til slutt stiller evalueringen spørsmål ved ordningen med at lån konverteres til stipend ved retur til hjemlandet. Utviklingseffekten avhenger i stor grad av at studenter faktisk vender hjem etter endt opphold i Norge. Retur er dermed viktig for å forebygge hjerneflukt. Likevel tyder evalueringen på at andre faktorer kan være vel så viktige i beslutning om bosetting. De fleste studenter fra utviklingsland får trolig ikke arbeidstillatelse i Norge etter endt utdanning. For de som får muligheten er et studielån en relativt

liten kostnad. Feltarbeid i hjemlandet, studiets relevans for hjemmeinstitusjonen og inngåtte forpliktelser om å returnere til hjemlandet er andre alternativer som også har effekt på hjemreise. Samtidig er det både vanskelig og ressurskrevende å følge opp om studenter faktisk reiser hjem og dette gjøres dermed ikke systematisk. Videre kan det være uhenksmessig å begrense adgangen til å arbeide i tredjeland, slik dagens ordning i teorien gjør. Sammenlignbare ordninger i andre land ser ut til å være i stand til å oppnå høye hjemreiserater gjennom andre mekanismer, for eksempel en bindende kontrakt. Å fjerne lån fra Kvoteordningen og omgjøre den til en ren stipendordning åpner opp for alternative og mer hensiktsmessige administrative løsninger.

### Anbefalinger

Evalueringen anbefaler konkrete tiltak som kan styrke effekten av kvoteordningen. Mindre justeringer kan øke utviklingseffekten, mens mer betydelige endringer vil være nødvendig for å fremme internasjonaliseringseffektene. Administrativt anbefales en sterkere og mer strategisk rolle for SIU.

For å styrke utviklingseffekten bør det treffes tiltak for å sikre relevans av kursene som tilbys, styrke koblingene til hjemmeinstitusjonene og øke åpenheten i valget av studenter. Disse tiltakene vil trolig være mer håndterlige dersom ordningen konsentreres om færre land.

For å styrke internasjonaliseringens mål bør Kvoteordningen definere tydeliggjøre på hvilken måte den skal styrke internasjonalisering. Noen få og mer skreddersyde grader, for eksempel fellesgrader eller sandwich-programmer, kan for eksempel generere viktige internasjonaliseringseffekter. Da bør opptak av kvotestudenter knyttes til slike grader som et krav. I tillegg bør det overveies hvorvidt ordningen skal dekke kostnaden knyttet til å etablere

denne typen grader og programmer. Hvor lenge en student kan få støtte under kvoteordningen og regelverket for reise mellom Norge og studentenes hjemland bør også vurderes.

Hvis lån-til-stipend-prinsippet fjernes og ordningen i stedet gjøres om til en stipendordning, åpner dette opp for alternative administrative løsninger som også vil gagne kvoteordningen som helhet. Det vil ikke lenger være nødvendig at Lånekassen har en rolle i ordningen. Dessuten kan de norske utdanningsinstitusjonene få en administrativ rolle ved å forvalte studentenes stipend til studentene kommer til Norge. En stipendordning forvaltet av institusjonene etter tildeling fra SIU kan gi større fleksibilitet til å dekke reelle kostnader, for eksempel for PhD-studenter. SIUs rolle bør styrkes for å operasjonalisere kravene til institusjonelle partnerskap og internasjonalt orienterte grader.

Utover at våre anbefalinger innebærer endringer i fordelingen av roller og ansvar, innebærer de foreslåtte endringene konsekvenser for deltakerne.

En kortere liste over deltakerland og strengere krav til faglig opplegg vil konsentrere kvotestudentene på færre nasjonaliteter og blant færre norske institusjoner. I tillegg til noen av de større universitetene, er det ikke usannsynlig at en mer konsentrert ordning kan være nyttig for noen av de mindre høyskolene som allerede har relativt mange kvotestudenter konsentrert i en eller noen få grader. Til gjengjeld kan ordningen ha større effekter på de institusjonene som deltar enn tilfellet er i dag. Det gjelder også effekter i form av resultatbasert finansiering knyttet til avlagte studiepoeng og innreisende studenter. Økt fleksibilitet kan også øke andelen PhD-studenter og dermed møte behov for postdoktorkompetanse ved universiteter i utviklingsland. En sterkere rolle for

partnerinstitusjoner kan også øke relevans for hjemlandets behov og styrke hjemmeuniversitetets nytteverdi av Kvoteordningen.

Endringene vil også ha negative effekter på institusjoner og land som ikke lenger vil dra nytte av Kvoteordningen. For en betydelig del av disse er samtidig effektene i dag såpass små at endringen vil ha begrenset reell betydning

## Executive summary

### Objective and approach of the evaluation

The objective of the evaluation is to assess the extent to which the Quota Scheme has achieved its objectives, how well its design supports these objectives, and whether it represents in the most cost-efficient way of reaching established objectives. The evaluation covers the period from 2001 to 2012.

The stated objectives of the Quota Scheme are to “*provide relevant education opportunities that benefit the students’ home countries and promote the internationalisation of higher education institutions in Norway.*”<sup>1</sup>

The evaluation uses a conceptual framework inspired by OECD’s Development Assistance Committee (DAC), assessing the *relevance* of the Quota Scheme in terms of problem analysis and design, its *effectiveness* in terms of achievement of objectives, and its *efficiency* in terms of resources and organisation. To structure the discussion, the evaluation also presents an interpretation of how programme objectives relate to activities and underlying assumptions.

In light of the complexity of objectives and large number of stakeholders, the evaluation combines several qualitative and quantitative methods. Effects on development are discussed through effects on learning using renowned conceptual frameworks for assessing learning outcomes. Effects on internationalisation are discussed in light of Norwegian policy objectives on internationalisation and international approaches to measuring results of internationalisation efforts.

### Relevance: Strong rationale but flaws in design

The Quota Scheme addresses relevant needs both in development and internationalisation. However, flaws in design including selection processes may limit its relevance to both objectives.

Research indicates that tertiary education benefits not only the individual but also the developing economy as a whole. Support to tertiary education is increasingly seen as crucial to economic development. Support to tertiary education in development is primarily in the form of building home-grown universities and research capacity in developing countries. Yet building institutions takes time. Universities in developing and emerging economies lack capacity to absorb surging demand, and are especially short of necessary post-graduate staff to scale up higher education nationally. Scholarships directed to students from developing and emerging economies can address capacity needs in the interim. Internationally, other programmes build on a similar rationale. The United Kingdom has practiced a scholarship scheme akin to the Quota Scheme since 1959, and the EU launched scholarship opportunities to students from outside the EU in 2006, as part of a broader internationalisation programme.

Two weaknesses in design could limit development effects. Firstly, the Quota Scheme lacks systematic considerations of relevance to home universities, home countries, and the students themselves. Norwegian institutions on a local level identify opportunities and are not required to involve partner institutions in their prioritisations. Partner institutions raise some concerns about lack of predictability on what opportunities will be offered to their students, afflicting their long-term planning ability. Secondly, there are no uniform procedures at the partner institutions

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<sup>1</sup> [http://siu.no/eng/Front-Page/Global-menu/Publications/Publication-database/\(view\)/391](http://siu.no/eng/Front-Page/Global-menu/Publications/Publication-database/(view)/391)

in informing and selecting students. This lack of transparency in student selection may negatively affect equity in access.

The Quota Scheme is not specifically designed to strengthen internationalisation, although this is an objective as well. Internationalisation is widely recognized as important and necessary across Norwegian higher education institutions. Norwegian higher education institutions are increasingly subject to a global knowledge market and need international exposure and partnerships to enhance relevance and quality of studies, broaden perspectives, attract international students and faculty and educate global citizens. In this context, a programme to strengthen internationalisation is relevant. An internationalisation programme primarily targeting developing countries is arguable also valuable.

However, the design of the Quota Scheme does not necessarily underpin internationalisation efforts at the Norwegian institutions. Actual and significant integration of new perspectives in academic activities would likely require involving partner institutions in development of tailored degrees such as joint degrees or sandwich programmes. Such efforts are presently encouraged under the Quota Scheme but not required.

The Norwegian higher education institutions do not use the Quota Scheme strategically to further priority fields or align with overall internationalisation strategies. The Quota Scheme is mostly a supplement other partnerships and internationalisation efforts. It is also mostly driven by committed individuals on an institute level.

#### Effectiveness: Significant development effects but limited effects on internationalisation

Overall, the quota scheme is a popular arrangement, among students as well as institutions. For

both, the scheme has more positive than negative effects, and for both it has limited costs. Yet being well-liked and having positive effects is not necessarily the same as having sufficient significant effects, justifying costs to public budgets.

The development effects of the Quota Scheme are its strong learning outcomes. Since its establishment in 1994, 4,545 students have completed at least one degree under the scheme. Of these, 78.5 percent (3,567 students) have completed a master's degree, 11.2 percent (507 students) have completed a PhD while 10.4 (471 students) have completed a bachelor's degree. The survey among former quota students indicates that students have been able to get better jobs and do better in their jobs as a result of the degree from Norway.

A high share of students return to their home countries upon completed studies, and return rates are over 70 percent for students from developing countries. Students from Eastern Europe, Western Balkans, and Central Asia countries have lower return rates. Russian students have the lowest return rates and typically study at a lower level than their fellow students from developing countries and China. Students from Eastern Europe, Western Balkans, and Central Asia countries also have lower share of PhD students compared to developing countries.

Effects on internationalisation are more limited and the marginal value added by the Quota Scheme has fallen over time. Interviews with Norwegian higher education institutions reveal limited demonstrable effects on their activities and results in internationalisation. Drawing from Norwegian policy and international literature, effects are measured along three dimensions:

- Integrating international perspectives at every level of education

- Increased quality of research
- Increasing diversity and international outlook

*Integrating international perspectives:* In earlier years, the Quota Scheme contributed to the development and establishment of courses taught in English, which in turn contributed to attracting international students beyond the Quota Scheme. Yet since this, the Quota Scheme has not contributed substantially to new degrees or courses. In recent years, the development of courses taught in English at Norwegian institutions is more likely related to increased international competition between institutions and overall increased emphasis on internationalisation of education. Despite encouragement from the Ministry of Education and Research, joint degrees or sandwich programmes have not been established as a result of or in relation to the Quota Scheme. Notably, the Quota Scheme does not cover the cost of establishing or developing this type of degrees and programmes.

An important exception is development-oriented studies, where the presence of quota students reportedly adds relevance and perspectives to courses. These studies are often also subject to stronger partnerships funded through other programmes, so it is difficult to isolate the effect of the Quota Scheme, other than as a useful supplement.

*Increased quality of research:* Research partnerships on international topics and with quota countries has increased in the evaluation period. Effects are however higher at Norwegian institutions that also nurture broader partnerships, and interviews reveal limited effects of the Quota Scheme on the quantity and quality of research.

*Increased diversity:* The most important effect noted by many of those interviewed is the significance of the Quota Scheme on diversity and as part of the institutions' global responsibility. This aspect matters to the Norwegian institutions. Yet with students spread across a large number of institutions, actual effects on the overall culture and international outlook that can be ascribed to the Quota Scheme are difficult to discern or quantify.

Objectives are not in principle conflicting, but in the current arrangement also not mutually reinforcing. Measures to strengthen one objective could strengthen the other, but more changes would be required to strengthen internationalisation effects than to strengthen development effects. Unless the Quota Scheme manages to contribute to the development of tailored degrees, joint degrees or sandwich programmes specifically responding to and integrating needs and realities in home countries, the internationalisation effects are likely to remain limited.

#### Efficiency – mismatch between responsibility and influence

The Quota Scheme appears, at first glance, resource-efficient in the sense that overhead costs are limited and most resources flow directly to beneficiaries. Administrative tasks are streamlined within existing public institutions. Yet this organisational simplicity has created a rigidity that negatively affects results and incurs a number of hidden costs.

First, there is a mismatch between responsibility and influence over key decisions and processes. The Norwegian Centre for International Cooperation in Education (SIU)<sup>2</sup> has the overall administrative responsibility and is responsible for overseeing the

<sup>2</sup> We will use the abbreviation "SIU" in the rest of this report.

Quota Scheme, yet most decisions are made in other institutions. SIU's administrative role further appears to have had limited impact on establishing linkages and synergies between various programmes that SIU administers and the Quota Scheme. SIU also does not make final decision on admission or student financing. In fact, slots can be allocated and students accepted without a secure student financing in place. The final decision on financing is often only made after the student's arrival in Norway, representing liquidity problems as well as financial risks for quota students. The general rule that quota students should be part of an institutional partnership and the encouragement of joint degrees or sandwich programmes is also not very strictly applied by SIU.

Second, public entities responsible for implementing the Quota Scheme have much broader mandates and are not tailored for the needs of the Quota Scheme. Specifically, funding gaps for PhD students and liquidity constraints for students from developing countries in general are common challenges. The evaluation especially questions whether the State Educational Loan Fund is well equipped to deal with quota students.

Third, funding through the Quota Scheme only covers the subsistence of the quota students. The lack of available resources for strengthening institutional partnerships and establishment of tailored programmes, such as joint degrees and sandwich programmes reduces effects on both development and internationalisation.

Finally, the evaluation questions the cost-benefit of the loan-to-grant arrangement. Encouraging and promoting return is important to mitigate the risk of brain drain in developing countries. Yet other factors also influence return, and the impact of the loan is uncertain. Most students from developing

countries are unlikely to obtain a work permit in Norway upon completed studies. For those that have such opportunities, a student loan is a minor cost. Fieldwork at home, relevance of studies to home institutions, and contractual commitments to return are other options. Monitoring and sanctioning actual return is difficult and costly and is not practised systematically. Also, limiting the possibility to work in a third country may be overly strict. Finally, comparable programmes in other countries seem to be able to obtain high return rates based on other mechanisms, for example a binding contract. Removing the loan from the scheme opens a new range of administrative option that may increase overall administrative efficiency.

### Recommendations

The evaluation recommends specific measures that could strengthen effects of the Quota Scheme. Smaller adjustment could increase development effects. More significant changes would be required to promote internationalisation effects. Administratively, a stronger and more strategic role of SIU is recommended.

In order to strengthen the development effects, steps should be taken to ensure relevance of courses offered, strengthen linkages to home institutions, and increase transparency in student selection. These measures might be more manageable if the scheme were concentrated in fewer and more strategically selected countries.

Selection of students could be more streamlined and transparent by establishing either a centralised admission process or establishing rules for dissemination of information and local selection processes.

In order to strengthen internationalisation objectives the Quota Scheme would need to more

clearly define what parameters of internationalisation it seeks to influence. More efforts to establish a few more tailored degrees, inter alia joint degrees or sandwich programmes, could contribute significantly to internationalisation. For this to happen, requirements rather than encouragements are likely needed. In addition, small resources should be available for promoting such degrees. This could be obtained in part by strengthening linkages to other programmes managed by SIU, and in part by specific and targeted resources.

If the loan-to-grant principle is removed, and the scheme instead converts into a scholarship programme, this opens up for alternative administrative arrangements. This would benefit the Quota Scheme as a whole by increasing flexibility and predictability. The Norwegian educational institutions could get an administrative role by managing the students' funds until the students arrive Norway, and the role of SIU could be strengthened to more strongly operationalize requirements of institutional partnerships and internationally oriented degrees. The financing should be less rigid and with fewer components of financing, more timely delivered.

The proposed changes would have implications across stakeholders.

Stronger requirements for actual partnerships and tailored degrees would likely concentrate students across fewer Norwegian institutions. Receiving quota students would require more efforts from the host institution, but could also strengthen academic developments at the same institutions. In addition to some larger universities, a few university colleges that already have a concentration of quota students in selected studies would benefit. Receiving quota students has some implications on budgets through the teaching components of the financing system,

which rewards both completed ECTS and number of incoming students.

More flexible and decentralized student scholarships would enable a higher share of PhD students under the Quota Scheme. Increased involvement of partner institutions in selection and development of programs and degrees could promote relevance to development needs and effects on home institutions.

Finally, changes will also affect institutions in quota countries in that some countries and some institutions will no longer be as relevant to the scheme. However, to many countries and universities, the number of beneficiaries is so limited that effects will be marginal.

# 1 Introduction

This report presents the evaluation of the Norwegian Quota Scheme. DAMVAD and Scanteam have conducted the evaluation on behalf of the Norwegian Ministry of Education and Research and the Norwegian Agency for Development Cooperation (hereinafter referred to as Norad).

## 1.1 Objective of the Quota Scheme

According to the official brochure on the Quota Scheme, published by SIU, the objective of the scheme is to “*provide relevant education that will benefit the students’ home countries when they return. The Quota Scheme also promotes the internationalisation of higher education in Norway*”<sup>3</sup>.

The Quota Scheme has two objectives; one that can be referred to as development or capacity building and one that can be referred to as internationalisation. Section 1.3.2 elaborates on the objectives.

## 1.2 Objective of the evaluation

The objective of the evaluation is to assess relevance, effectiveness and efficiency of the Quota Scheme. The evaluation covers the time period 2001-2012.

The need for an evaluation of the quota scheme was raised by the Government White Paper on internationalisation in 2009, noting that the context for both internationalisation and development policies had evolved, requiring a new look at the arrangement (St.meld. nr. 14 (2008-2009)). The findings will inform future policy and programming aimed at both

internationalisation of Norwegian higher education institutions and Norwegian development policy, specifically contributions to building capacity and strengthening human capital resources in developing countries.

## 1.3 Methodology

The evaluation builds a conceptual framework inspired by OECD’s Development Assistance Committee (DAC), combined with an analysis of programme logic, a wide range of methods and a multidisciplinary team. The combination of methods reflect the complexity of the scheme: The Quota Scheme targets three types of stakeholders (students, Norwegian higher education institutions, higher education institutions in developing countries) and encompasses two objectives (development in partner countries and internationalisation in Norway). High complexity necessitates a combination of both qualitative and quantitative methods, as well as a robust analytical framework for the evaluation.

### 1.3.1 Evaluation criteria

Three main criteria structure the evaluation: Relevance, effectiveness, and efficiency. These criteria draw from OECD-DAC’s evaluation framework for development assistance.<sup>4</sup>

- The first criteria, **relevance**, assesses the quality of the underlying analysis and assumptions, the extent to which programme design was adequate to address identified challenges and ob-

<sup>3</sup> [http://siu.no/eng/Front-Page/Global-menu/Publications/Publication-database/\(view\)/391](http://siu.no/eng/Front-Page/Global-menu/Publications/Publication-database/(view)/391)

<sup>4</sup> For more elaboration, readers are invited to consult <http://www.oecd.org/dac/evaluation/daccriteriaforevaluatingdevelopment-assistance.htm>

jectives, and whether design incorporated existing knowledge and best practice from other similar interventions and prevailing policies.

- **Effectiveness** measures the results and effects generated by the intervention in light of actual objectives and expectations.
- Finally, the evaluation considers whether the scheme used scarce resources **efficiently**. Could smaller resources have achieved the same or better results? Was use of available resources, personnel, and involved entities optimal?

Figure 1.1 illustrates the evaluation criteria.

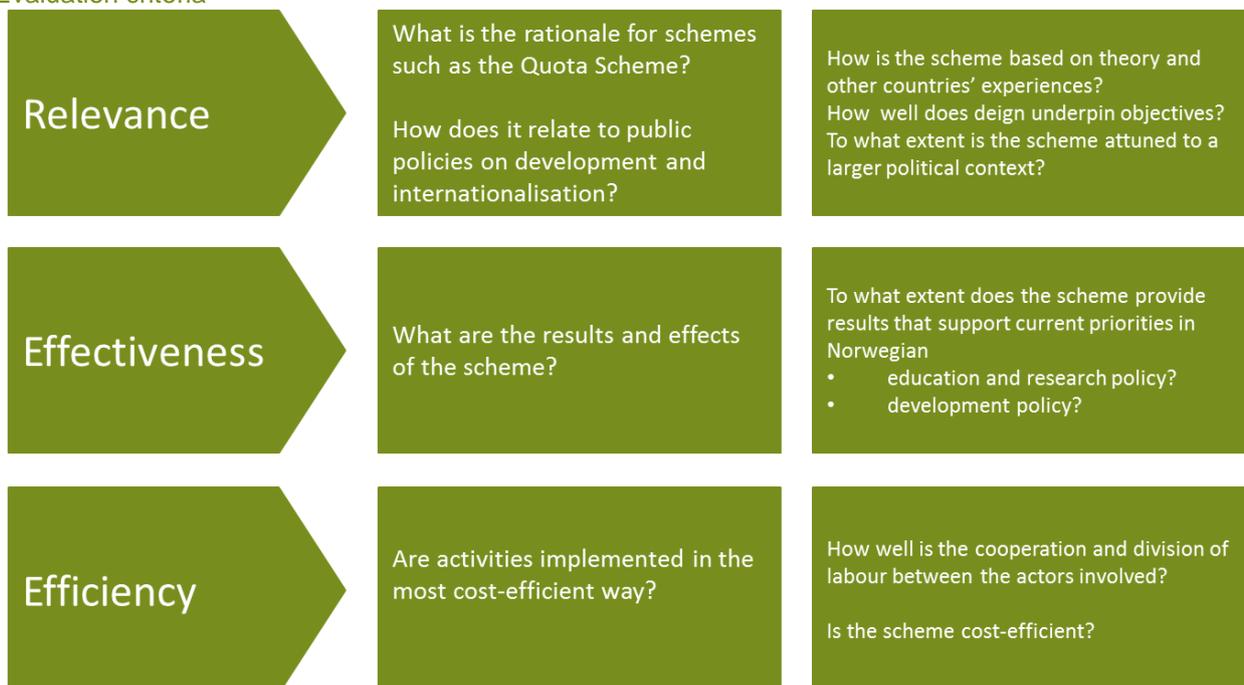
### 1.3.2 Interpretation of programme logic

To structure the discussion, the evaluation presents an interpretation of how programme objectives relate to activities and underlying assumptions (figure 1.2).

The scheme has two objectives (St.meld. nr. 14 (2008-2009)):

- The first objective is to provide opportunities for higher education for students from identified countries while mitigating the risk of brain drain by encouraging return upon completed studies. Student mobility is assumed to build capacity for individual students, who in turn contribute to development in their home country. Student mobility is also assumed to link higher education

**FIGURE 1.1**  
Evaluation criteria



Source: DAMVAD, with framework from OECD DAC

institutions and businesses in these countries to global knowledge networks in a better way.

- The second objective of the Quota Scheme is to strengthen internationalisation of Norwegian higher education institutions through relations with partner institutions in the students' home countries. Hosting quota students should underpin the Norwegian institutions' internationalisation strategies, ideally in synergy with other internationalisation efforts. Figure 1.2 illustrates this logic.

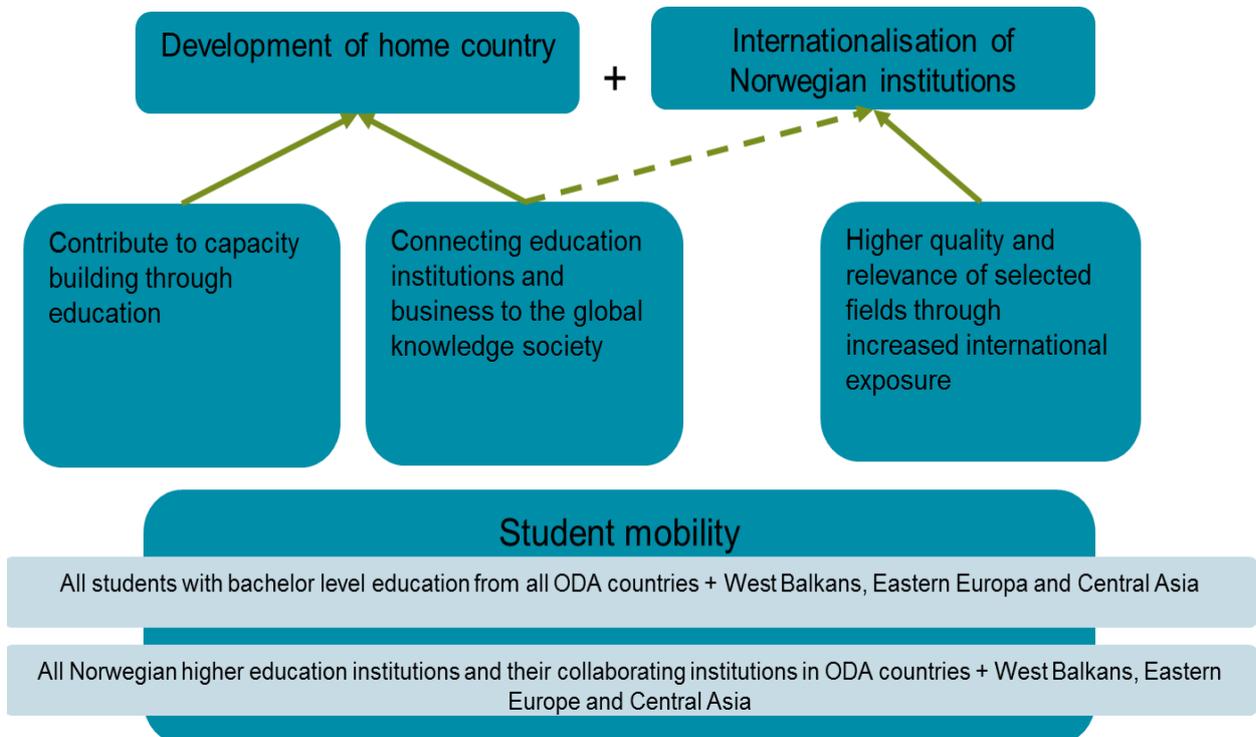
### 1.3.3 Combination of methods

The evaluation combines qualitative and quantitative methods across objectives and stakeholders.

Annex 1 elaborates further on the methodology. The evaluation builds on the following inputs:

- **Literature review:** An extensive literature review of programme documents, related policy papers, budget propositions, and earlier reviews has informed the analysis of the programme logic, the programme's development over time, its alignment with national development and educational policies, and international best practice. Mapping of costs and the analysis of administrative procedures also largely draws from literature review, supplemented with consulting relevant stakeholders.

**FIGURE 1.2**  
Interpretation of programme logic



Source: DAMVAD, based on policy documents and SIU's brochure

- **Semi-structured interviews:** The evaluation team has conducted interviews with stakeholders involved in the management of the Quota Scheme, Norwegian higher education institutions, and partner universities in developing countries. The interviews provided insights in particular to the internationalisation effects on Norwegian institutions and the development effects on partner institutions. Semi-structured interviews is a useful method to understand complexity and causality. The limitation of this method is typically that observations cannot be aggregated and do not provide hard evidence. To capture diversity and variations, interviews included a range of different stakeholders and higher education institutions.
- A total of 52 **interviews** were conducted:
  - Interviews with 27 representatives from 11 Norwegian educational institutions were conducted. Of these, 20 interviews were with representatives from both administrative and academic staff. Seven of the interviews were with the principal or equivalent.
  - Interviews with 19 coordinators or focal persons at partner institutions were carried out, covering 15 different universities or units in eight countries (Bangladesh, Ethiopia, Ghana, Nepal, Sudan, Tanzania, Uganda, Vietnam and Zambia). The institutions had institutional arrangements with six Norwegian institutions (Oslo and Akershus University College, the Norwegian University of Science and Technology, the University of Bergen, the University of Oslo, the University of Tromsø and the Norwegian University of Life Sciences).
  - Interviews with the Ministry of Education and Research, Norad, SIU, the Norwegian State Educational Loan Fund and the Ministry of Foreign Affairs.
- **Survey:** A survey invited all former and current quota students dating back to 2000 to provide inputs on an elaborate set of questions, addressing most aspects of the scheme. The survey collected information on fields of study across institutions, student origin, time-period and gender, and informed on motivation and rationale, other academic and work trajectory, and self-assessment of individual effects. The response rate was 50 percent. This is a high response rate for a survey on this magnitude and gives a robust basis for analysis. Results must however be interpreted in light of any asymmetries in response rates. In this case, the survey is considered highly representative, with distribution across nationalities, gender, degrees, and study fields close to what we find in registry data. One exception is that Chinese students are less likely to respond than the other nationalities. More recent graduates are also overrepresented among the respondents compared with the overall population. In addition, access to stable internet connection may be a limitation to response rates, skewing responses in the favour of former students living in larger cities or in Norway, and students in developing countries that are currently employed.
- **Tracing students through LinkedIn:** To underpin the other methods and map the onwards trajectory of former quota students, a tracing analysis using LinkedIn was carried out. This exercise required limited resources and had more of an experimental nature than the other

methods used. It provided limited results. However, it did corroborate findings from the survey and the registry data, and is referenced specifically in the report when used.

- A **bibliometric survey** using the Scopus database maps joint publications between Norwegian institutions and institutions in quota countries, and publication with quota students as authors.
- **Data on students from the Norwegian State Educational Loan Fund and Statistics Norway:** With individual data on 5,553 quota students, the evaluation analysed study progress and other results across nationalities, years, gender, academic fields etc. With a large number of entries across several registries and institutions over time, there are certain holes and inconsistencies. However, overall these data provide important insights on an aggregate level. Detailed explanations of interpretations are in annex 3.

#### 1.3.4 Team

DAMVAD has led the evaluation and worked in partnership with Scanteam. A reference group consisting of representatives from the Ministry of Education and Research, Norad, the Norwegian State Educational Loan Fund, SIU, University of Oslo (appointed by the Norwegian Association of Higher Education Institutions), the Norwegian Network for Private Higher Education Institutions, and the National Unit of Students in Norway has supported the work.

All findings, omissions, conclusions, and recommendations remain the sole responsibility of the evaluation team.

## 1.4 Structure of the report

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The report has the following structure: Chapter 2 presents the background and design of the Quota Scheme, how it has evolved over time, and key figures on, inter alia, participating institutions, nationalities, fields of study. Chapter 3 discusses the relevance of scheme objectives and design, including targeting of activities and benefits. Chapter 4 presents the effects of the scheme on each of the two objectives and discusses the compatibility of the dual objectives. Chapter 5 evaluates the efficiency of the scheme in terms of governance arrangements and cost-efficiency. Chapter 6 provides recommendations for the Ministry of Education and Research and for Norad going forward. Details on methodology and interview objects are in annexes.

## 2 The Quota Scheme in brief

### 2.1 About the Quota Scheme

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The Quota Scheme provides funding for 1,100 students at Norwegian higher education institutions each year. Of the 1,100 students, 800 are from developing countries while 300 are from Western Balkans, Eastern Europe and Central Asia. Most students study on master's or PhD level. A list of eligible countries is defined by the Ministry of Education and Research.

Within this annual quota, Norwegian higher education institutions can apply for slots. In principle, students should be recruited through established institutional partnerships between Norwegian higher education institutions and institutions in countries eligible under the Quota Scheme. Exceptions can be made in special circumstances including political oppression, gender issues or especially disenfranchised groups. Applications from Norwegian higher education institutions are reviewed by SIU, which distributes available slots to Norwegian higher education institutions based on proposed courses and relevant partnerships. The institutions, jointly with partner institutions in eligible countries, are responsible for the selection and admission of students.

With some exceptions, quota students can apply the Norwegian State Educational Loan Fund for student loans and grants mainly as other Norwegian students. More specifically, quota students can apply for student loans for the time stipulated for the education, and no longer than four years. Students who enter courses taught in Norwegian are entitled to financial support for one additional academic year of preparatory Norwegian language studies. Students may apply for financial support for travel expenses to Norway, and for one annual visit home if the educational programme lasts more than one year. Financial support for fieldwork in the student's home

country may also be granted if the fieldwork is included in the education. Support will also be given for an extended study year if the fieldwork is carried out during the summer, but only for the actual period of the fieldwork. Students returning home within three months after graduation are entitled to travel support. In this way, the Norwegian State Educational Loan Fund funds the students' living costs through loans that are converted to grants if the students return home. If former quota students return to Norway within ten years after termination of graduation, the grant is converted to loan and must be repaid. In practice, the Norwegian State Educational Loan Fund have no standardised procedures to verify whether students are in their home country or a third country. Chapter 5.2 discusses this in more detail.

### 2.2 History and rationale

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The Quota Scheme has been in operation for more than two decades, but support to students from developing countries to study in Norway was in place already in 1962 with Norad's scholarship programme. From the academic year 1977-1978, particularly disadvantaged students from developing countries already enrolled at a Norwegian university were eligible for support under the "the Section on Developing Countries" (u-landsparagrafen).

Increasingly, universities and subsequently colleges started offering language classes and introductory courses in Norwegian society to address identified challenges these students had in participating in Norwegian education. Several shortcomings with this arrangement led to amendments towards the current Quota Scheme. First, critics argued that targeting individual and particularly disadvantaged students without incentivising return undermined development effects. Second, with no

ceiling or target for the number of qualifying students, it was difficult to control costs.

In 1989, a report from a Government appointed task force on international students (Flatin Committee) argued that development efforts should address development needs on a country level rather than preferences of individual students (NOU 1989:13). The report proposed to replace the existing arrangement with a scholarship scheme for a fixed amount of students eligible for funding for four years each, and to establish a Centre for international education to administer the scheme, with disbursements handled by the Norwegian State Educational Loan Fund. The proposed arrangement was further refined in a White Paper to the Storting (St.meld. nr. 40 (1990-91)). The proposal specified the arrangement for issuing loans, which would in turn be converted to grants subject to return, and emphasised that slots should be allocated to higher-level candidates and especially targeted courses taught in English. The 1994 National Budget first allocated funds to 600 students from developing countries and 150 from Eastern Europe. The first Quota students were accepted in the academic year 1994/95.

The list of eligible countries under the Quota Scheme has changed over time. At present, the countries at the DAC list can be categorised in developing countries and countries in the Western Balkans, Eastern Europe and Central Asia. Eligible countries also include South Africa, Russia, Brazil, and Cuba (Ministry of Education and Research 2013, SIU<sup>5</sup>). China is included, but students from Taiwan are not eligible for scholarship.

- “Developing countries” refer to countries listed in the three lowest categories in OECD’s DAC List of ODA Recipients.
- At the time when the Quota Scheme was established there was a great political emphasis in Norway on strengthening the institutional cooperation to Eastern and Central Europe. The reason for the Ministry to suggest that a certain number of Eastern European students could benefit from the same advantage as students from developing countries through the new scheme, must be seen in the context of the political situation in Eastern Europe at this time. These were removed from 2004 as new EU members
- In the circular covering 2008-2011, South Africa, Russia and Croatia were listed as additional countries to the DAC countries. Croatia is no longer included
- Central and Eastern Europe and Central Asia, and students from the Palestine area were on the list for the period 2005-2008 (Kunnskapsdepartementet 2007, 2004).

The Quota Scheme was evaluated in 2001.<sup>6</sup> The evaluation was overall positive and concluded that the Quota Scheme was of great importance to universities and university colleges in promoting internationalisation. The evaluation noted that quota students were consistently resourceful and contributed both academically and socially to develop the Norwegian higher education institutions. The evaluation found that the availability of fully funded studies in Norway contributed to underpinning international

<sup>5</sup> <http://www.siu.no/content/search?SearchText=quota+scheme>

<sup>6</sup> *Rapport fra arbeidsgruppe for evaluering av støtteordningen i Statens lånekasse for utdanning for studenter fra utviklingsland og Sentral- og Øst-Europa*, Oslo 20. april 2001.

partnerships beyond the Quota Scheme itself. The Quota Scheme also motivated the establishment of courses taught in English, which in turn strengthened the attractiveness of the Norwegian institutions to other international students.

The evaluation also noted that it was too early to estimate specific development effects in partner countries, but it also pointed out that the Quota Scheme had potential to contribute to the development of democratic institutions in Eastern Europe, international and cross-cultural understanding, and economic development and peace. At the time, about half of the quota students returned home after completed studies, and the evaluation stressed the importance of institutional partnership to encourage return and mitigate brain drain.

The evaluation made a number of recommendations, some of which influenced the onward implementation.

First, the evaluation recommended a stronger emphasis on institutional cooperation, and this was subsequently introduced as a requirement for eligibility.

Second, the evaluation recommended a longer time perspective for allocation of study slots to ensure better predictability and planning at partner institutions. In practice, slots are allocated for new students only and current students receive financing for the duration of the study to which they are accepted. The allocation period was consequently increased to three years. As discussed later, this still does not fully address concerns of predictability at partner institutions. A recommendation to extend the loan period to 12 months for the quota students on PhD level was followed.

The evaluation noted challenges in delays relating to immigration regulations and urged a shorter processing time to get a residence permit for students. In addition, the evaluation called for the Norwegian State Educational Loan Fund's application form and all relevant information, to be prepared in English.

It was further suggested to introduce funds for the institutions to provide educational programmes with relevance and quality, and welfare activities, and to strengthen relations with student welfare organisations. These recommendations did not lead to specific changes.

Finally, the evaluation proposed that SIU should administrate the Quota Scheme, with the Norwegian State Educational Loan Fund responsible for funding. This echoed the recommendation from the 1989 Flatin Committee (NOU 1989:13) and was implemented in 2005.

From January 1<sup>st</sup>, 2005, SIU took over responsibility for the Quota Scheme from the Ministry of Education and Research. The shift was seen as important to make distribution of quotas more systematic and transparent, increase overall administrative oversight, and enable stronger synergies with other internationalisation programmes.

Also from 2005, the Ministry of Education and Research introduced a recommendation that the quota students should largely be recruited from partner institutions. This emphasis on partnerships followed on general internationalisation policies and ambitions, and also responded to recommendations from the 2001 evaluation. In addition, it helped to underpin existing relationships between institutions and limited the number of applications. There are no strict requirements for the format or content of such partnership agreements in circulars from the Ministry or in SIU's allocation procedures.

## 2.3 Actors involved

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The **Ministry of Education and Research** is the overall responsible entity for the Quota Scheme. The Quota Scheme is funded over the budgets of both the Ministry of Education and Research and the Ministry of Foreign Affairs. The Norwegian State Educational Loan Fund and SIU are subordinated agencies of the former Ministry. The Ministry also has the overall responsibility for the higher educational institutions in Norway.

The **Norwegian State Educational Loan Fund** is the responsible body for managing the funding of the Quota Scheme in accordance to regulations of the educational support act. The Norwegian State Education Loan Fund receives and proceeds the applications for loans and grants from the quota students, and follow up the repayment and cancellation of debt when applicable.

The **Norwegian Centre for International Cooperation in Education (SIU)** is responsible for the general management of the Quota Scheme. SIU determines the allocation of quotas across Norwegian institutions. This includes allocating quotas to the educational institutions and ensure that the institutions use the quotas in accordance with the guidelines. The allocation of quotas is valid for three years.

The total number of quotas shall in principle be allocated to all institutions applying, provided that they meet the criteria. Consequently, the Quota Scheme is applied broadly and is not concentrated among the largest institutions.

The **higher education institutions** are responsible for providing study programmes that quota students can attend. They allocate quotas internally according to the guidelines proposed in the Ministry of Ed-

ucation and Research's circular No. F-03-13 (Kunnskapsdepartementet, 2013) and they are responsible for following up students towards completed studies. Institutes who wish to receive quota students propose the desired number of slots to their university/university college administration, which makes priorities across institutes based on the number of slots allocated to them by SIU.

The study programmes are included in the educational institutions' ordinary provision of programmes and courses, and shall be available for other students as well. Institutions are responsible for designing and executing their own internationalisation strategies, and are encouraged to offer English courses. The higher education institutions also typically assist quota students with practical issues including following up the immigration and registration processes, and informing about or assisting in applications for financing, including the conditions for the remission of the loan.

The **students** apply for admission from their home country, and applicants must belong to a **university or a university college that has a formal collaboration agreement with the Norwegian institution**. The students must also demonstrate that they have lived in their home country for at least one year prior to admission at a Norwegian educational institution.

Institutions can in exceptional situations admit students without a connection to a collaborated educational institution, so called "free movers", Particular circumstances taken into account are for example political oppression, sexism or bad conditions for the disabled.

## 2.4 The Quota Scheme in numbers

The number of students arriving each year, from the beginning of the 2000s until today, has been relatively stable at 399 students in average per year.<sup>7</sup> From data provided by the State Educational Loan Fund, 47 Norwegian higher education institutions have used the Quota Scheme within the period 1994-2012. Currently, 43 higher education institutions in Norway offer scholarship under the Quota Scheme.<sup>8</sup> These institutions applied for 1,759 quotas in the current three-year period (SIU 2010). For the past few years, the number of requested quotas from higher education institutions has exceeded the number of available quotas by about 60 percent. Distribution of both requests and allocations is fairly stable over time.

As the largest educational institution in Norway, the University of Oslo has the greatest number of quota students, and received 189 quotas for the academic year 2012/13. The Norwegian University of Science and Technology and the University of Bergen got 168 and 154 quotas respectively. Eight institutions got less than five quotas.

### 2.4.1 Distribution by students' country of origin

Of the 5,553 quota students we have identified in our data for the period 1994-2012, 4,000 are from developing countries, including China. Further, 1,530 are from Western Balkans, Eastern Europe or Central Asia.<sup>9</sup> Half of these individuals are from Russia. The top five countries, with respect to number of students, are Russia, China, Ethiopia, Ghana and Tanzania (cf. table 2.1).

Of all quota students in the period 1994-2005, 56.6 percent come from developing countries, while 15.6 percent come from Western Balkans, Eastern Europe and Central Asia (cf. table 2.2). In the period 2006-2010 and after 2010 the share of quota students from developing countries increased to around 65 percent. The share of quota students from China decreased throughout the whole data period.

**TABLE 2.1**  
Number of quota students and top five countries. 1994-2012

Geographical area	Number of quota students	Of these (the top five countries)				
		Russia	China	Ethiopia	Ghana	Tanzania
	Total					
<b>Developing countries</b>	4,000		629	511	486	313
<b>Western Balkans, Eastern Europe and Central Asia</b>	1,530	766				

Sources: The Norwegian State Educational Loan Fund and Statistics Norway

<sup>7</sup> Registry data from the Norwegian State Educational Loan Fund and Statistics Norway  
<sup>8</sup> SIU

<sup>9</sup> In addition, 18 individuals belong to the category "other" with respect to country of origin and country of origin is missing for five individuals.

**TABLE 2.2**  
Quota students by origin. 1994-2012

	Before 2006	2006- 2010	After 2010	Total
<b>Developing Countries</b>	56.6 %	65.1 %	64.0 %	60.8 %
<b>Western Balkans, Eastern Europe and Central Asia</b>	15.6 %	11.7 %	12.7 %	13.8 %
<b>China</b>	12.6 %	10.9 %	7.8 %	11.3 %
<b>Russian Federation</b>	14.9 %	11.8 %	15.3 %	13.8 %
<b>N</b>	2,737	2,053	758	5,548

Sources: The Norwegian State Educational Loan Fund and Statistics Norway

Note: N = quota students with known country of origin

For the academic year 2012/13, there were quota students from approximately 75 countries enrolled at the 43 Norwegian educational institutions with quotas. Approximately 60 of the countries were represented at the 11 Norwegian higher education institutions interviewed in this evaluation (see table 2.3). As many as 37 nationalities were represented at the University of Oslo, while Narvik University College had quota students from two countries.

The categorisation of countries used in this evaluation corresponds to SIU's current list.<sup>10</sup> In this list, the Russian Federation is one of the countries in the category Western Balkans, Eastern Europe and Central Asia. Students from the Russian Federation accounts for more than half of the students in this category. The second largest country, with respect to number of students, is China. Because of their

<sup>10</sup> <http://www.siu.no/content/search?SearchText=quota+scheme>

size, Russia and China are reported as separate categories.

**TABLE 2.3**  
Quota countries represented at 11 selected Norwegian educational institutions

Educational institution	Countries represented
<b>University of Oslo</b>	37
<b>University of Bergen</b>	29
<b>Norwegian University of Science and Technology</b>	19
<b>Norwegian University of Life Sciences</b>	15
<b>Oslo and Akershus University College</b>	14
<b>University of Tromsø</b>	11
<b>University of Nordland</b>	9
<b>Molde University College</b>	6
<b>Stord/Haugesund University College</b>	5
<b>Narvik University College</b>	2
<b>Other</b>	46
<b>Total countries represented</b>	75

Sources: The Norwegian State Educational Loan Fund and Statistics Norway

TABLE 2.4

Number of cooperation agreement for 11 selected educational institutions for the period 2011-2014

Countries	Diakon- hjemmet University College	Oslo and Akershus University College	Molde University College	Narvik University College	Stord/ Haugesund University College	NTNU	NMBU	University of Bergen	University of Oslo	University of Tromsø	University of Nordland	Total
<b>Afghanistan</b>							1					1
<b>Albania</b>	1					1	1					3
<b>Angola</b>	1					1						2
<b>Azerbaijan</b>						1	1	1	1	1		5
<b>Bali</b>						1						1
<b>Bangladesh</b>		1				5	2	4	3	3		18
<b>Belarus</b>			1									1
<b>Bolivia</b>								1	1			2
<b>Bosnia &amp; Herzegovina</b>							4					4
<b>Brazil</b>		2				7	3		6			18
<b>Burkina Faso</b>								1				1
<b>Cambodia</b>								2				2
<b>Cameroon</b>						1		2	2	2		7
<b>Chile</b>						1						1
<b>China</b>		6	1	4		20	4	12	17	3	1	68
<b>Colombia</b>		1						4	1			6
<b>Costa Rica</b>							1	1				2
<b>Cuba</b>		2						2				4
<b>Dominican Republic</b>		1						1				2
<b>Ecuador</b>								3				3
<b>Egypt</b>			1			1		1	1			4
<b>El Salvador</b>			1							1		2
<b>Ethiopia</b>			2			5	3	6	7	2		25

Gambia									1			1
Georgia								5	1			6
Ghana		3				3		2	2	1		11
Guatemala								1		4		5
Honduras										1		1
India		1				5	2	8	4		1	21
Indonesia						3	1		1	1		6
Iran							1	1				2
Iraq										1		1
Ivory Coast												0
Jordan				1								1
Kenya								2	1			3
Kosovo							1					1
Lesotho	1											1
Macedonia							1		1			2
Madagascar	1											1
Malawi	1	1			2	1	1	1	1	1	1	10
Mali							1		1	1		3
Mongolia								1				1
Mozambique	1					1		2	1			5
Myanmar									4			4
Namibia	1	1								1		3
Nepal		1	1			2	2	2	3	2		13
Nicaragua		1										1
Nigeria						2			1			3
North Korea									1			1
Pakistan		1	1				2	4				8

<b>Palestinian area</b>						1		1				2
<b>Paraguay</b>							1					1
<b>Peru</b>								2	2			4
<b>Russia</b>			2	4	2	1	1	6	14	10	11	51
<b>Rwanda</b>								1				1
<b>Serbia</b>						1						1
<b>Sierra Leone</b>										1		1
<b>Somalia</b>									1			1
<b>South Africa</b>	1	5	1			2	2	3	6	3		23
<b>Sri Lanka</b>						3		2	1	1	2	9
<b>Sudan</b>		4				1	1	6	4			16
<b>Swaziland</b>	1											1
<b>Syria</b>									1			1
<b>Tanzania</b>			1		1	4	2	9	2			19
<b>Thailand</b>							1	2	1		1	5
<b>The Philippines</b>								1			1	2
<b>Tibet</b>										1		1
<b>Uganda</b>		1				1	1	1	2	1		7
<b>Ukraine</b>	1				4			1			2	8
<b>Vietnam</b>						8	2	2	3	1		16
<b>Western Sahara</b>										1		1
<b>Yemen</b>								1				1
<b>Zambia</b>	1	1				1	1	1				5
<b>Zimbabwe</b>	1					1	1	1	1			5
<b>Total</b>	12	33	12	9	9	85	45	110	100	44	20	479

Source: SIU

Note: NTNU = Norwegian University of Science and Technology, NUMB = Norwegian University of Life Sciences

## 2.4.2 Distribution by institutions and degrees

As noted above, the main rule is for students to be recruited through established institutional partnerships between Norwegian higher education institutions and institutions in countries eligible under the Quota Scheme. Norwegian higher education institutions reported 736 written cooperation agreements between the Norwegian institutions and institutions in the quota countries by the last application for quotas (2011-2014).<sup>11</sup> In addition, 198 informal types of institutional cooperation were reported. Table 2.4 show how this was reflected at the 11 institutions that we have interviewed. The University of Bergen and the University of Oslo had the highest number of cooperation agreements, with 110 and 100 agreements respectively.

In the current quota period, the quota students can attend 337 different courses. The 11 institutions interviewed and studied more in-depth offer 174 programmes (cf. table 2.5). The list of approved cooperation agreements and study programmes can be updated continuously by applying to SIU.

Of the total number of quota students in the period 1994-2012, 74.2 percent have studied at master's level and 13.7 percent at PhD level. Looking at the quota students that are registered as active students per 2012, 69.3 percent are enrolled in a master's programme, 19.4 percent in a PhD programme, and 10.6 percent are enrolled in a bachelor's programme. Quota students have been enrolled at PhD level at 17 of the 47 institutions we have identified in our data.

**TABLE 2.5**  
Number of study programmes for quota students provided at 11 selected educational institutions, March 2011

Educational institution	Programmes
University of Oslo	29
Norwegian University of Science and Technology	37
University of Bergen	46
University of Tromsø	16
Oslo and Akershus University College	10
Norwegian University of Life Sciences	1
University of Nordland	7
Molde University College	6
Narvik University College	13
Diakonhjemmet University College	3
Stord/Haugesund University College	6
<b>Total</b>	<b>174</b>

Source: SIU

Note: The Norwegian University of Life Sciences has formally only one PhD programme. This programme covers all subject areas of the PhD education. Oslo University College and Akershus University College merged in august 2011. Bodø University College received university status in January 2011

The majority of the quota students, with master's degree as their highest level of education, study (or completed their studies in) natural sciences, vocational and technical subjects, humanities and arts or social science and law. Among those who have studied at PhD level, most have studied (or study) natural sciences, vocational and technical subjects or health, welfare and sport (see table 2.6).

<sup>11</sup> SIU

Both level and field of education varies between the country categories. Of the 762 quota students that have completed a PhD degree or still study at this level, 273 have started their PhD without completing a master's degree in Norway first. Of these 58 are from Ethiopia (the largest group), while more than 60 are from China, Russia and Tanzania (equally divided between the three countries).

More than 90 percent of the students from both China and other developing countries have master's or PhD level as their highest level of education (figure 2.1). Quota students from the Russian Federation and other countries in Western Balkans, Eastern Europe and Central Asia are more likely to study

at bachelor's level, compared to other quota students.

Student from the developing countries mainly study natural sciences, vocational and technical subject, social sciences and law, and humanities and arts (figure 2.2). In addition, a larger share of students from the Russian Federation study business and administration.

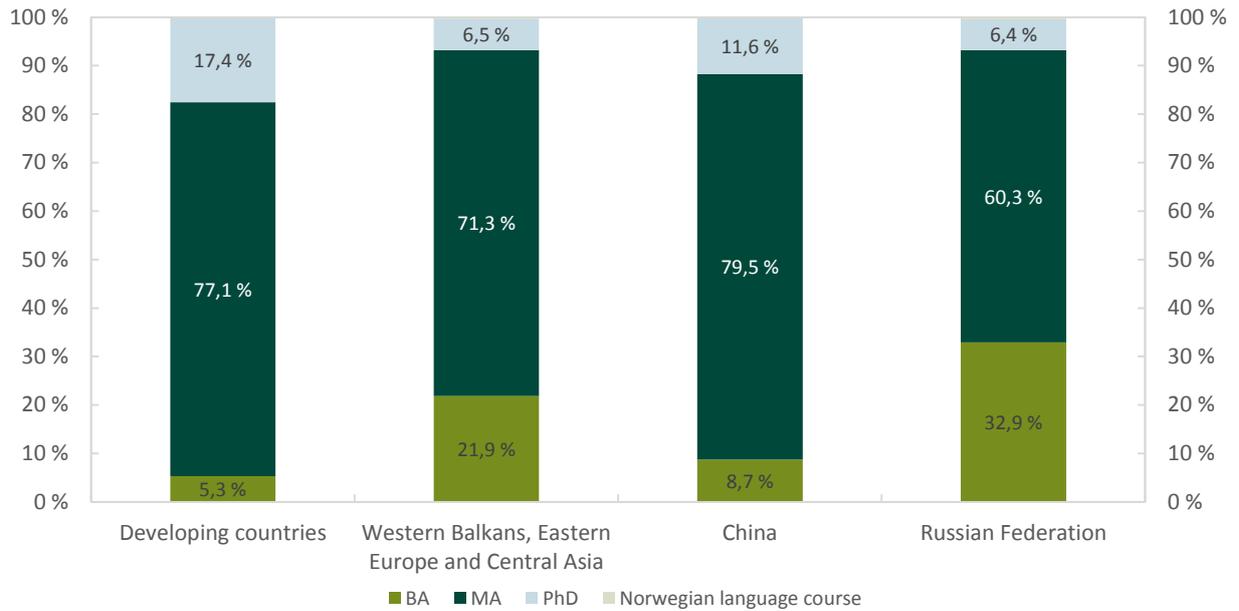
**TABLE 2.6**  
Highest level of education. 1994-2012

Field of education	BA	MA	PhD	Total	Pct. (total)
Humanities and arts	102	787	65	954	17.2 %
Education	22	206	16	244	4.4 %
Social sciences and law	34	711	86	831	15.0 %
Business and administration	174	506	13	693	12.5 %
Natural sciences, vocational and technical subjects	123	1,235	347	1,705	30.8 %
Health, welfare and sport	140	363	185	688	12.4 %
Primary industries	28	157	22	207	3.7 %
Transport and communications, safety and security and other services	17	81	9	107	1.9 %
Unspecified field of study	5	30	9	44	0.8 %
Missing	15	43	10	68	1.2 %
<b>Total</b>	<b>660</b>	<b>4,119</b>	<b>762</b>	<b>5,541</b>	<b>100 %</b>

Sources: The Norwegian State Educational Loan Fund and Statistics Norway

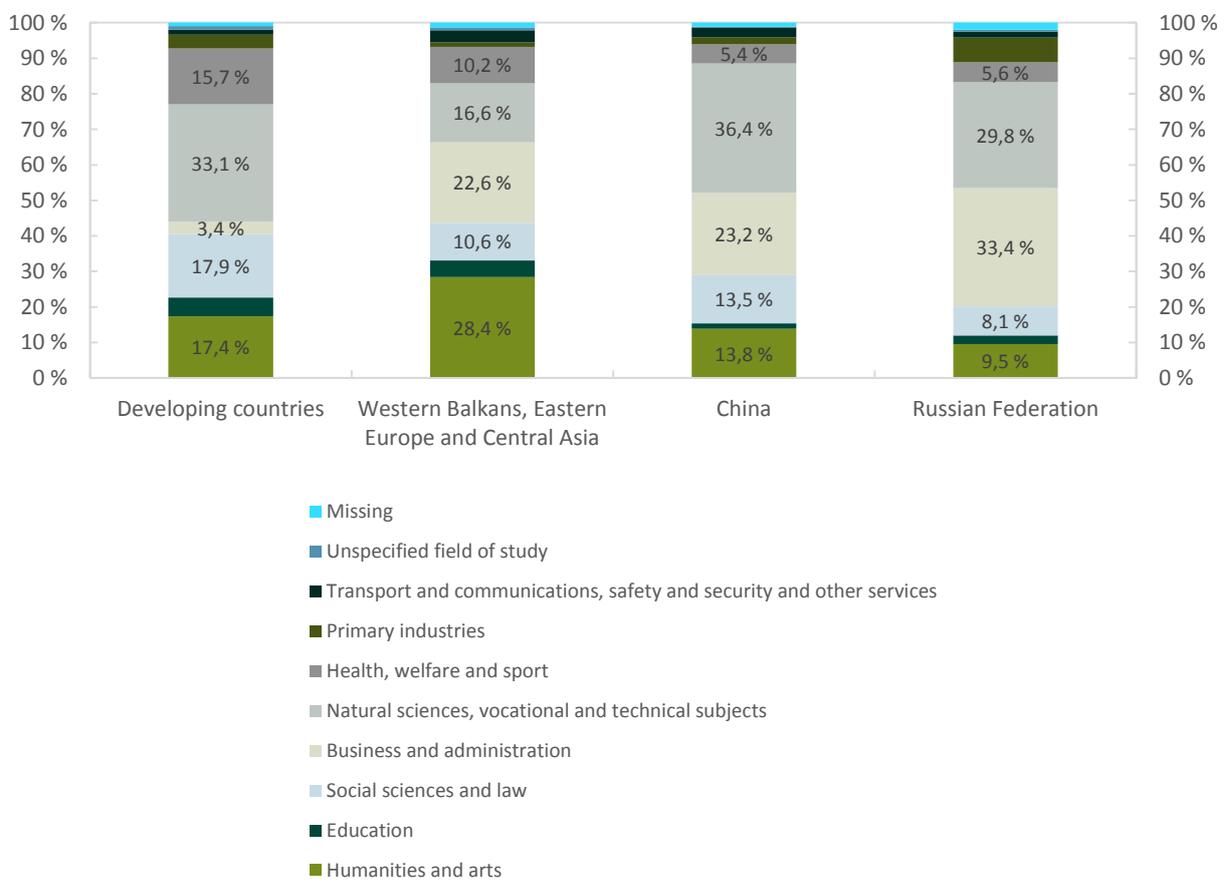
Note: Of the 5,553 students identified in the data, 12 quota students have Norwegian language course as their highest level of education.

**FIGURE 2.1**  
Highest level of education by country of origin



Sources: The Norwegian State Educational Loan Fund and Statistics Norway

**FIGURE 2.2**  
Field of education by country of origin



Sources: The Norwegian State Educational Loan Fund and Statistics Norway

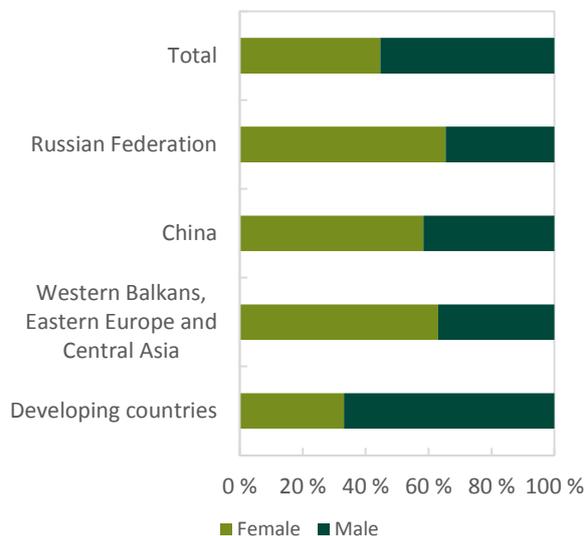
### 2.4.3 Distribution by gender

The overall gender distribution show that about 45 percent of the quota students are female and 55 percent male. However, this distribution varies somewhat with country of origin. More than 60 percent of the students from the Western Balkans, Eastern Europe and Central Asia are women. The same holds for the students from the Russian Federation. The majority of the students from China are also female, whereas only 33 percent of the students from other countries categorised as developing countries are female (cf. figure 2.3).

Male quota students tend to study at a higher level than their female counterparts do. The share of male students studying at PhD level is higher than the share of female students (16.3 and 10.5 pct. respectively). Further, 16 percent of the female students have bachelor's level as their highest level of education. Only 8.5 percent of the male students have bachelor's level as their highest level of education.

There are some small differences in subjects studied with respect to gender. Most notably, a larger share of the female students study business and administration, whereas a larger share of the male students study natural sciences, vocational and technical subjects (see table 2.7).

FIGURE 2.3  
Gender by country of origin



Sources: The Norwegian State Educational Loan Fund and Statistics Norway

**TABLE 2.7**  
Distribution of subjects by gender

Field of education	Female		Male	
	Number of students	Pct.	Number of students	Pct.
<b>Humanities and arts</b>	462	18.6 %	504	16.4 %
<b>Education</b>	135	5.4 %	109	3.6 %
<b>Social sciences and law</b>	393	15.8 %	438	14.3 %
<b>Business and administration</b>	433	17.5 %	260	8.5 %
<b>Natural sciences, vocational and technical subjects</b>	509	20.5 %	1,196	39.0 %
<b>Health, welfare and sport</b>	363	14.6 %	325	10.6 %
<b>Primary industries</b>	100	4.0 %	107	3.5 %
<b>Transport and communications, safety and security and other services</b>	40	1.6 %	67	2.2 %
<b>Unspecified field of study</b>	17	0.7 %	27	0.9 %
<b>Missing</b>	28	1.1 %	36	1.2 %
<b>Total</b>	2,480	100 %	3,069	100 %

Sources: The Norwegian State Educational Loan Fund and Statistics Norway

## 3 Relevance

*Abstract: The Quota Scheme addresses relevant needs both in development and internationalisation. Yet design and selection processes may limit its relevance to both objectives.*

This chapter reviews the rationale for the Quota Scheme, the extent to which the scheme in fact addresses the issues it intended to address and its alignment with existing policies and best practice in Norway and internationally. The discussion includes the following questions:

**First, are the objective valid?** Are needs adequately analysed and understood?

- To what extent can higher education through studies abroad contribute to development?
- What are the main challenges for internationalisation of Norwegian higher education institutions, and to what extent does the Quota Scheme address them?

**Second, are activities consistent with objectives?** Is the programme adequately addressing identified challenges?

- Is the targeting of students and institutions responding to actual needs among these and underpinning desired results?
- To what extent does the process for selecting students and allocating slots reflect competence needs in home countries, as defined by national authorities, partner institutions, or areas prioritised by Norwegian development assistance?

- To what extent does design reflect policy priorities in internationalisation?
- Is there a difference in the way small and larger institutions use the scheme?
- Has the Quota Scheme aligned with international best practice and Norwegian development policy and are lessons from similar interventions applied?

The chapter discusses the two questions across the two objectives (i) development and (ii) internationalisation.

### 3.1 Higher education is relevant to development

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This section reviews two types of international literature on education and development. First, the evaluation presents evolving policy documents on the rationale for prioritizing tertiary education and approaches to such programming. Second, we revisit literature on the linkages between individual skills and broader development. The chapter then proceeds to discuss the Quota Scheme design and its potential to promote development.

#### 3.1.1 Support to higher education is back on

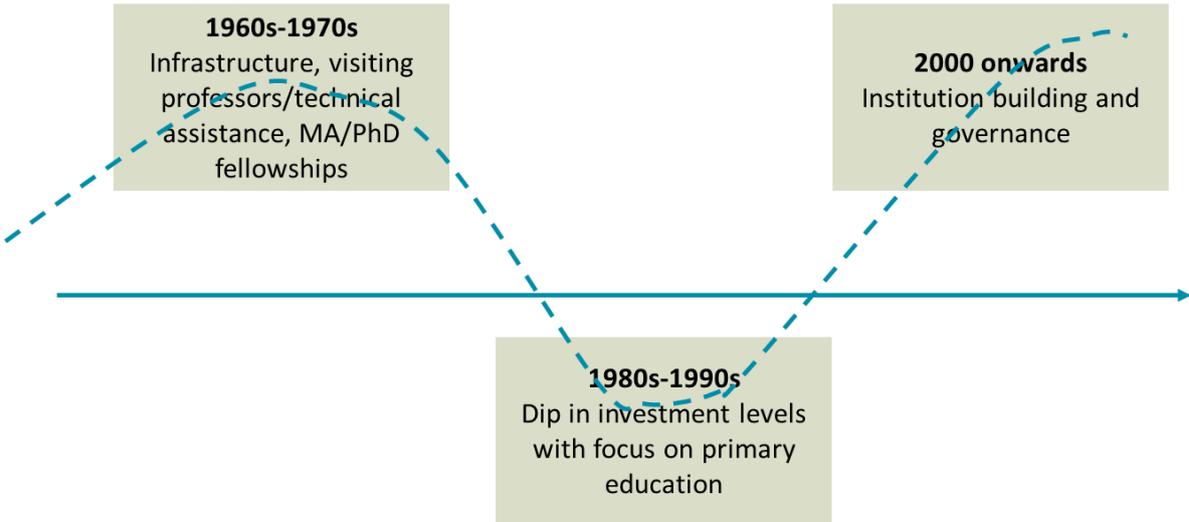
The justification for supporting tertiary education has changed over time. Considerable Official Development Assistance (ODA) funding for university systems in the 1960s and 1970s mainly targeted specific efforts including building infrastructure, funding technical assistance in the form of visiting professors, and extending a large number of fellowships at both master's and PhD level (Hyden 2013). These approaches also inspired the establishment of the Quota Scheme.

Global ODA to tertiary education tapered off in the 1980s and 1990s following a series of studies looking at the social rates of return to tertiary versus primary education. A 1986 World Bank study estimated that the increase in national income resulting from an additional year of education was on average 13 percent *lower* for higher education compared with primary education in developing countries (Psacharopoulos et al., 1986). A later review of 98 countries produced the same basic conclusion (Psacharopoulos and Patrinos 2002). This “return-on-investment” argumentation prevailed at the 2000 World Education Forum in Dakar where the international community agreed that primary education should serve as a driver of broad social welfare improvements. In 1994, the World Bank cut its lending to higher education – from 17 percent of its education funding in 1985-89 to just seven per cent in 1995-99.<sup>12</sup> After the turn of the millennium, higher

education regained ground in development priorities. From the early 2000, a growing body of literature suggested that conventional economic measures of returns on educational investment have overlooked societal effects through job creation, enhanced entrepreneurship, and mobility in the labour market. Higher education was increasingly argued to provide the human capital that in turn can build institutions crucial to development: accountants, teachers, nurses, doctors, engineers, and lawyers (Kapur and Crowley, 2008)<sup>13</sup>.

Research has also demonstrated a positive impact on economic development from tertiary education. For example, Bloom et al (2006) find that expanding tertiary education may promote faster technological catch-up and improve a country’s ability to maximize its economic output.

**FIGURE 3.1**  
Trends in financing higher education with ODA funds



Sources: SciDev, Scanteam and DAMVAD (Conceptual figure)

<sup>12</sup> <http://www.scidev.net/global/migration/feature/funding-for-higher-education-facts-and-figures.html>

<sup>13</sup> [http://www.cgdev.org/files/15310\\_file\\_HigherEd.pdf](http://www.cgdev.org/files/15310_file_HigherEd.pdf).

The share of total education ODA going to tertiary education increased from 27 to 34 percent between 2002 and 2009 (Brookings 2013).

### 3.1.2 Development policies favour institution building

In parallel with this renewed interest for higher education and research, development policymakers were increasingly aware of the importance of strong institutions to ensure sustainable development.

Two main features characterise state of the art in education programming. First, policies and programmes in the education sector encompass the entire education chain – from early childhood through tertiary education. Second, policies emphasised the need for strong homegrown universities to generate and disseminate relevant capacities and research.

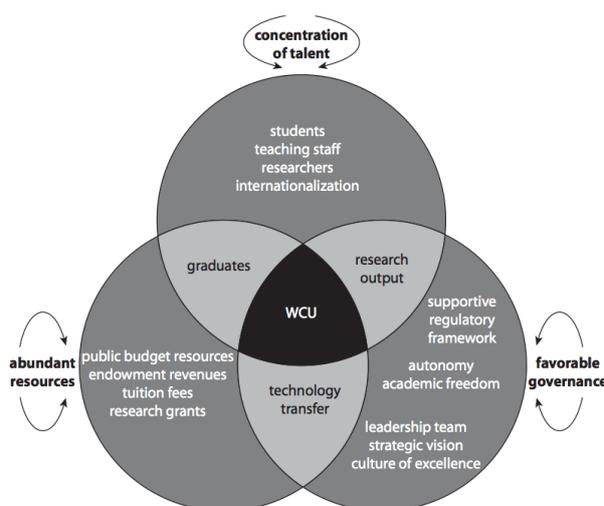
The World Bank launched its *Skills toward Employability and Productivity* (STEP) in 2010, and subsequently a tool for monitoring progress in this field, *Systems Approach for Better Education Results* (SABER) in 2013. SABER consists of evidence-based frameworks in 13 fields, from early childhood to workforce development.

Its Workforce Development tool diagnoses how well the education system equips individuals to meet the demand for skills in the labour market. Recent studies have focused on how to build research-based quality universities, with success factors including (i) critical mass of good students and faculty, (ii) quality of university governance including its independence from political interference, and (iii) sufficient funding (Salmi 2009, Altbach and Salmi 2011). The more

complete system is shown below, where the objective is to produce “World Class Universities”, WCU (see figure 3.2).

Similarly, Norwegian development policy in tertiary education puts institution building at the centre and emphasises the role of local universities. A Norad policy paper from 2005 summarises Norwegian development policies in tertiary education.<sup>14</sup> The paper notes the role of strong and independent universities as “vehicles for development”.

**FIGUR 3.2**  
World class universities at the centre of development



Source: Salmi 2009  
Note: WCU = world-class university

The policy paper further promotes “comprehensive support to higher education and research in partner countries” and notes that support should be aligned with national targets for basic and long-term research and higher education at university level.

<sup>14</sup> Norad (2005): Making Support to Higher Education and Research more Effective : Donor Policies and Modalities : The Norwegian Case

The paper lists relevant policy documents for Norwegian development assistance to tertiary education, the most important being the *Strategy for Strengthening Research and Higher Education in the Context of Norway's Relations with Developing Countries* issued by the Ministry of Foreign Affairs (MFA) in 1999. Keywords across Norwegian and global policies are institution building and strong national universities, inter alia through partnerships and joint research.

The Norwegian Programme for Capacity Development in Higher Education and Research for Development (NORHED) launched in 2013 reflects these approaches. NORHED supports the capacity of higher education institutions in Low and Middle Income Countries (LMIC), in strong partnerships with academic institutions in Norway.

### 3.1.3 Scholarships abroad can increase capacity

Yet building institutions take time. African universities are unable to absorb increasing demand. Sub-Saharan African countries suffer from a shortage of academic staff due to limited postgraduate opportunities (Montanini 2013). Enrolment rates in tertiary education in 2011 was 8 percent according to the World Bank, varying between 15 percent in South Africa and 4 percent in Ghana.

In the BRIC countries, the picture is different yet also under pressure. The tertiary gross enrolment rate in Russia is over 80 percent. China has raised its enrolment rate from 3 percent in the late 1980s to 20 percent in recent years, with India at 17 percent, and Brazil at 32 percent. In these countries,

the main challenge is of upholding quality and equity in the face of rapid expansion (Tilak 2013).

International experiences also support the idea of offering international studying opportunities to students from developing countries. Relevant examples include the Commonwealth Scholarship and Fellowship Plan (CSFP) (Commonwealth Scholarships 2012) and the Erasmus Mundus Programme<sup>15</sup>. The CSFP was established in 1959 and has offered various scholarships and fellowships to students as well as academic staff from Commonwealth countries. The Commonwealth Scholarship Commission conducted its own impact survey in 2008 and report high return rates to home country, a high share of alumni working in higher education institutions and 90 percent of the respondents working in higher education reported that they had been able to introduce new practices and innovations in their workplaces because of their scholarships.

The Erasmus Mundus also offers scholarships on master's and PhD level to study at selected European universities. The programme aims to "enhance the quality of European higher education and to promote dialogue and understanding between people and cultures through cooperation with Third-Countries". The Erasmus Mundus External Cooperation Window scheme was launched in 2006 and offers scholarships to students from third countries. Their scholarships are higher than those for European students, and eligibility is subject to the student having spent no more than 12 months of the last five years, studying or working in the country of studies. The third country window is relatively new and assessing effects is a bit premature. Akin to the Quota scheme, students apply through selected

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<sup>15</sup> [http://eacea.ec.europa.eu/erasmus\\_mundus/programme/about\\_erasmus\\_mundus\\_en.php](http://eacea.ec.europa.eu/erasmus_mundus/programme/about_erasmus_mundus_en.php)

partnerships under the programme. The most notable differences from the Quota Scheme is that the programme also includes support to the development of specific courses.

### 3.1.4 Understanding demand

The Quota Scheme intends to provide relevant capacities to individual students with a view of supporting development. Already in 1989, the Flatin Committee had noted as a shortcoming of the Quota Scheme's predecessor that it overlooked national capacity needs in developing countries. Are all topics and degrees equally important to development or are some more important than others? With enrolment rates in the single-digits, one could argue that all tertiary education contributes positively. Yet an economy's ability to absorb various types of skills may vary with level of development and with economic profile. Mapping and targeting skills needs in each country is unrealistic for a scholarship scheme spread across more than 50 countries. Three perspectives could provide some guidance on relevant courses:

- First, study programs requested by home universities would indicate a need for postgraduate capacities
- Second, student demand could be an indicator about expected labour market demand. Students arguably have a better sense of future economic opportunities in their countries than Norwegian academic staff
- Third, priority areas in Norwegian development policy may indicate areas documented to be relevant to development and where Norwegian expertise is relatively high

Interestingly, none of these aspects informs the allocation of slots offered to quota students. SIU distributes slots across Norwegian higher education institutions based on applications. The applications

are a result of proposed slots from interested institutes at the Norwegian higher education institution: Based on interviews with management, it seems that applications are not subject to strategic discussions aligned with overall internationalisation strategies, but mostly collect and communicate requests from the lower level.

The evaluation in 2001 raised concerns with the lack of linkage to home university needs and gaps in allocation of slots. Consequently, and since 2005 institutional collaboration at university level has been a precondition for eligibility. As noted in various instruction letters from the Ministry of education and Research, the general rule is that students should be recruited through a partnership agreement between a Norwegian institution and a partner in one of the eligible countries. Exceptions to this rule can be made under special conditions, which may include political oppression, gender discrimination or difficult conditions for the disabled. Such exceptions should be discussed with SIU to ensure equal practice across institutions.

However, the partnership requirement does in varying degrees involve considerations about the quality or content of partnerships. SIU normally requires that the institutions must document partnership agreements by submitting a copy of the agreement. Interviews, however, indicate that the actual quality and content of these partnerships vary. The required institutional arrangements can be limited to general statements of intent that have little real content. A reported institutional arrangement could boil down to a more personal relation at the institute level such as former students maintaining contacts with their Norwegian degree advisors. As earlier pointed out in section 2.4.2, 198 of the institutional cooperation for the period 2011-2014 were informal, while 736 of the partnerships were based on a more

formal agreement. The large number of partnership is an indication that depth of partnerships vary.

The Quota Scheme does not allocate any resources for partner institutions. Institutions cover costs related to coordination and recruitment. Interviews indicate that the Quota Scheme in many cases can add value to existing strong partnership, but only alongside funding from complementary programmes.

There are a few examples of such mutually beneficial and long-term partnerships. Tanzania's Sokoine University of Agriculture and Norway's University of Life Sciences have collaborated for about 40 years on a range of issues. The University of Bergen has worked with universities in the Sudan for about the same period, as has the Norwegian University of Science and Technology with the engineering milieu in Nepal. In these cases, courses offered through the Quota Scheme typically complement existing research partnerships and go on to contribute with postgraduate capacities at the partner institutions. Yet the core of these partnerships tends to be research funded under other internationalisation programmes, such as NOMA<sup>16</sup> and NUFU<sup>17</sup>, supplemented with student funding from the Quota Scheme.

In interviews, home institutions are concerned that allocation of quota slots lacks predictability, and that they have limited influence on what courses are offered. This undermines both relevance and their own strategic planning. From a development perspective, a selection process more attuned to the needs of partner institutions and less to the needs of Norwegian institutes might have strengthened

both relevance of study fields and potential institutional impact.

### **3.1.5 Lack of transparency in selection process**

Higher education is typically available only to a privileged elite. On average, the World Bank has calculated that a student from the lowest socio-economic quintile has 15 times less chance of entering a university than one from the highest quintile (Montanini 2013). Across Sub-Saharan Africa, there are only about 62 female students for every 100 male students. In the BRIC countries, public funding for higher education has lagged behind rapid expansion, with growth in private education and student fees (Tilak 2013). This would indicate that scholarship schemes need to select students carefully to ensure as equitable access as possible.

An important debate in development policy has been how to understand the distributional effects of higher education (Patrinos et al., 2006). The individual effects increase with higher levels of education. International development policies therefore emphasise the need for equitable access and financing to distribute higher education opportunities and ensure social mobility.

Concerns about distributional effects underscore the importance of transparent and fair selection processes. Registry data, interviews, and our survey indicate that this process lacks transparency, with implications for distribution of opportunities. In general, quota students apply through open calls. The students apply from their home country, and must come from a university or a university college that has a formal collaboration agreement with the relevant Norwegian institution.

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<sup>16</sup> Norad's Programme for Master Studies

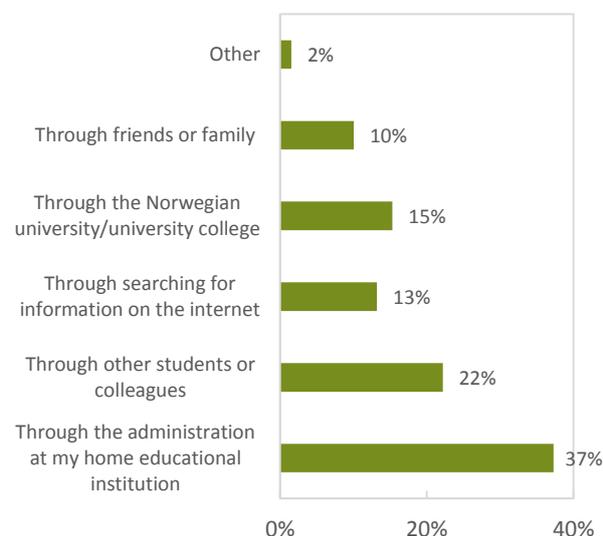
<sup>17</sup> The Norwegian Programme for Development, Research and Education

The partner institutions are responsible for selection of students following allocation of slots at the Norwegian universities and university colleges. The lack of clarity on selection procedures creates an element of uncertainty for the Norwegian institutions regarding student quality and relevance in terms of the Norwegian institutions' internationalisation strategy.

It is the Norwegian institutions, on a local level, who identify opportunities, and student selection varies between institutions. However, it is unpredictable for partner institutions to know in what programmes and in what level of education it becomes available quotas. The lack of predictability for partner institutions may limit their ability to establish transparent procedures and curbs any influence on subject matter or an institution-wide open selection. Interviews with partner institutions however indicate that there is no uniform process. Some publish opportunities for all students to consider, others more actively recruit on an institute level and at the discretion of the responsible institute and focal person.

In the survey, the majority of students (37 percent) report that they first heard about the Quota Scheme from the administration at their educational institution. However, other sources are also important: 22 percent heard about the Quota Scheme from other students or colleagues, 13 percent from the internet, and 15 percent from the Norwegian institution. The lack of consistency in source of information about the opportunity confirm the impression from the interviews that the process varies between countries and institutions. Figure 3.3 illustrates this.

**FIGURE 3.3**  
How students were informed about the Quota Scheme



Source: DAMVAD

The distribution of students by country and gender demonstrates that these processes may disadvantage female students. The share of female students is low for developing countries, and lower than for the other country categories. Only 33 percent of the students from developing countries are female. Part of the explanation may be in the fact that female students are underrepresented also on an undergraduate level in these countries. Going forward, it might be worth considering specific efforts to ensure recruitment of female students.

### 3.1.6 Financial support attracts quota students to Norway

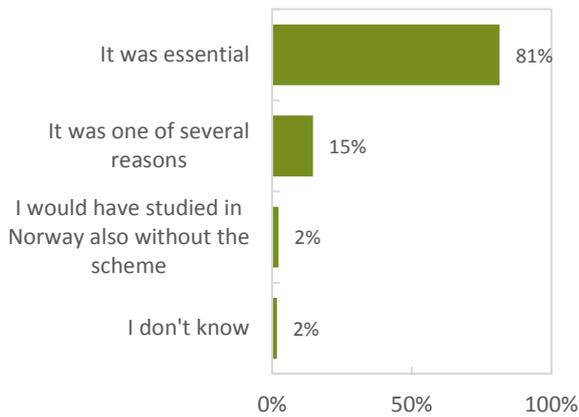
Survey data and interviews indicate that the Quota Scheme provides opportunities otherwise not available to these students. The availability of financial support is the main motivating factor for studying in Norway. For 82 percent of the students, the availability of financial support was essential to the choice of coming to Norway. Other deciding factors include

institutional collaboration (47 percent) and academic quality of host institutions (33 percent). Figure 3.4 illustrates the significance of the Quota Scheme to attract students to Norway.

However, Norway is not necessarily the first choice for students, and the financing is itself an important factor in coming to Norway. Asked about what they would have done without the support from the Quota Scheme, 39 percent state that they would have studied in another country, while 45 percent would have either worked or studied in their home country. Country origin to some extent influence these responses (see figure 3.5).

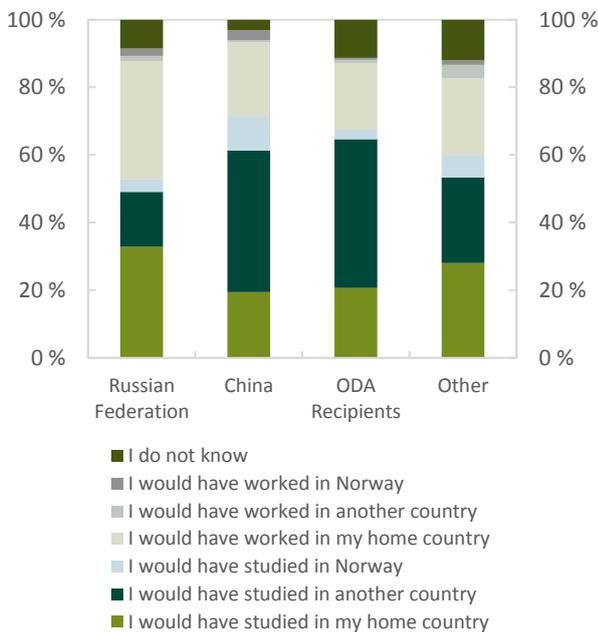
These figures indicate that the availability of financing most likely provide educational opportunities to students that would otherwise not have been able to study abroad. Whether it captures the students least likely to find alternative options is however not clear.

**FIGURE 3.4**  
Importance of Quota Scheme for deciding to study in Norway



Source: DAMVAD

**FIGURE 3.5**  
If the scheme did not exist

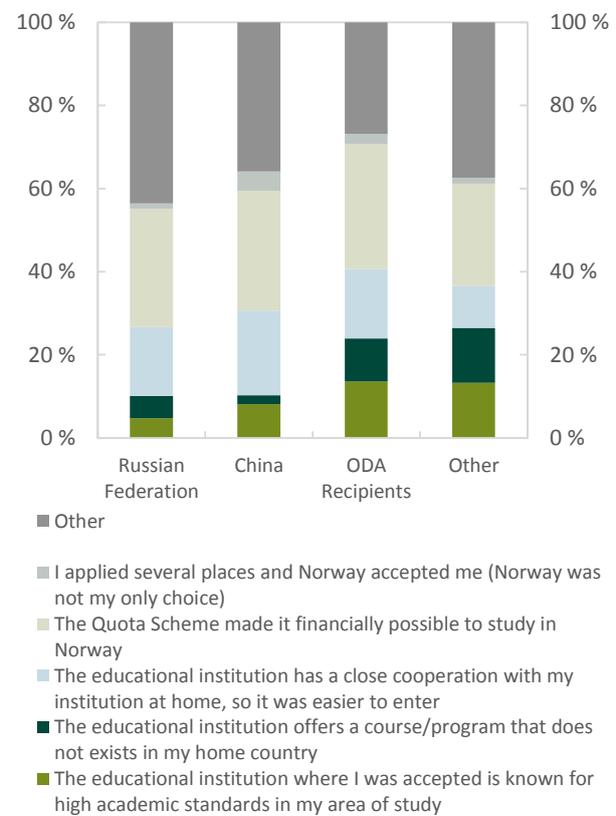


Source: DAMVAD

Figure 3.6 illustrates the overall motivation for students from different countries to come to Norway and study under the Quota Scheme. The main difference is in the students' opinion about the ability

of the Norwegian institutions to offer courses and academic standards not available in the home country. The availability of financing is equally relevant across categories of home country.

**FIGURE 3.6**  
Motivation for studying in Norway



Source: DAMVAD

### 3.1.7 Not designed for the most relevant degrees

Most of the quota students complete a master's degree. PhD level education is also highly relevant to a number of partner institutions and arguably essential to strengthen their research capacity. As noted above, many universities suffer from shortage of post-graduate levels necessary to scale up higher education opportunities.

The Ministry of Education and Research also encourages sandwich degrees, meaning that either the Norwegian or the home institution issues a degree with significant parts of coursework carried out at the partner institution. Both types of degrees are difficult to fit into the regulations and restrictions applied to the Quota Scheme.

#### Lack of flexibility for PhD students

Norwegian institutions in interviews echo the previous evaluation by raising concerns that the Quota Scheme is not well equipped to receive PhD students. First, many PhD students start with a master's level education in order to qualify for a doctoral programme. Combining individual data from the Norwegian State Educational Loan Fund and Statistics Norway, we find that of the 507 students that have completed a PhD, 47 percent have also completed a master's degree under the Quota Scheme. As noted in section 2.4.2, of the students admitted directly to a doctoral programme, 20 percent are from Ethiopia, followed by Russia, China, and Tanzania with about 10 percent each. Comparing the country groupings developing countries, Western Balkans, Eastern Europe and Central Asia, China, and Russia, the latter has the lowest share of PhD students.

Interviews with Norwegian institutions reveal some reluctance to enrol quota students from partner institutions directly at a PhD programme because of limited prior qualifications. As a result, prospective PhD students often take a Master's degree in Norway first.

The first barrier for PhD students is the four-year limitation in the financing available. In principle, quota students are only eligible for four years of funding, insufficient for both a master's and PhD degree, combined completed in five years. Regulations for the quota scheme 2013-14 specifically note: "*If the applicant plans to complete a PhD, financial aid can only be granted for one year at the master's level*" (§51-2).<sup>18</sup>

There are two possible ways of getting around this limitation. First, the rules also state, "*if the educational programme includes field work in the student's home country, then the period of which support is given is prolonged to correspond with the period of the field work, financial aid may be given for a total of up to five years*". In other words, if the quota student can spend one year of at least one degree in his or her home country, it is possible to complete both a PhD and a master's degree. One year is a long time for fieldwork.

The other possibility is that "*in the event of a delay in the completion of the educational programme, financial aid may be given for up to one year over and above the standard time*". For this to apply however, the student must already have exceeded the standard time, i.e. two years for a master's degree and three years for a PhD.

<sup>18</sup> Rules for the Quota Scheme: <http://www.lanekassen.no/nb-NO/Toppmeny/Languages/Rules/rules-2013/rules-for-the-quota-scheme-2013-2014/>

The second barrier is that in order to qualify for student financing, quota students must prove that they have lived in their home country for at least one year prior to admission at a Norwegian higher education institution. Prospective PhD students have typically moved back and forth between institutions to prepare their thesis application under proper supervision prior to admission. Upon being accepted to a doctoral programme however, they need to present a new application for student loan demonstrating that they have resided in their home country for one year. Lack of a full year may lead to rejection from the Norwegian State Educational Loan Fund.

Administrative staff at the Norwegian higher education institutions refer to episodes in which quota students have been rejected loans and grants from the Norwegian State Educational Loan Fund after they have come to Norway. There are few actual cases, but significant work is required to advise on and respond to requirements for financing, and lack of predictability is seen as a problem.

The Norwegian State Educational Loan Fund, however, state that this requirement is not systematically controlled. The Norwegian State Educational Loan Fund will assume that the educational institutions control if and for how long the students have lived in their home country before coming to Norway, and that they therefore have no routine to verify this matter. The Norwegian State Educational Loan Fund refer, however, to one known case where this has happened, and are open to it may have occurred in a few more cases.

A third barrier is the time lag often passed between delivering a thesis and defending it. After finishing a PhD, candidates typically have to wait for their doctoral thesis defence. During this time they are not funded and their visas may expire, and if returning home, their travel back to Norway to defend their

thesis is not covered. In this interim, students will typically lose their student status, which means that they no longer are entitled to student residence or student health services, and they must be able to document other income to access a residence permit.

Finally, financing through the Quota Scheme does not cover costs related to conference participation and technical equipment necessary for a doctoral student. Some institutions cover these costs from administrative budgets, depending on the wiggle room available to them.

Because of these limitations, many Norwegian institutions have stopped admitting quota students at PhD level altogether. Only 14 percent of all the quota students (1994-12) have studied at PhD level (see section 2.4.2). We find in our data that per 2012 there were 195 PhD students under the Quota Programme divided on 11 educational institutions. About 30 percent of these students were enrolled at the University in Oslo. The same number of PhD students were enrolled at the University of Bergen and 23.6 percent at the Norwegian University of Life Sciences. The remaining 15.9 percent of the PhD students were enrolled at the Norwegian University of Science and Technology, the Norwegian School of Veterinary Science, Vestfold University College, Molde University College, Oslo School of Architecture and Design, Hedmark University College, Oslo and Akershus University College or the University of Nordland.

Of the 11 institutions interviewed by the evaluation, there are six universities and five university colleges. Of the five university colleges, three are accredited to offer PhD programmes. This means that a total of nine of the 11 institutions can offer PhD programmes under the Quota Scheme, but only five

report that they currently have quota students at PhD level. Four of these are universities.

### Joint degrees and sandwich programmes are encouraged but difficult

A **joint degree** refers to cases in which two or more institutions collaborate on a degree programme.<sup>1</sup> Such programmes usually include a degree of mobility (virtual or physical) on the part of students or teaching/research staff. A joint degree is characterised by the course of studies that leads to a joint transcript issued by the institutions involved.

A **sandwich programme** represent less wide-range forms of education cooperation than joint degrees.<sup>1</sup> A sandwich programme is a programme of study in which the student takes the first and last part of a course of study at his or her home university, while the central part is taken at a cooperating institution.

A **study programme** is the term for a study unit consisting of a set of subject topics. A study programme can refer to a whole degree, such as a master's degree in nursing, or to shorter courses, such as a one-year programme.

The Ministry of Education and Research encourages the institutions in various circulars ("rundskriv") to relate the Quota Scheme to joint degrees, sandwich programmes or joint study guidance.

Sandwich or joint degrees could also potentially strengthen internationalisation of Norwegian institutions. Chapter 3.2 discusses this possibility in more detail. Internationally, programmes akin to the Quota Scheme typically put a stronger emphasis on

joint degrees. These are presented in chapter 3.3. Establishing sandwich programmes and joint degrees are demanding processes, limited mainly by other factors than the Quota Scheme design, as also discussed in chapter 4.2. Some interviewees raise however the issue that sandwich programmes where the home institutions issues the degree, is difficult when students are required to spend at least a full year in Norway.

### 3.1.8 Long list of eligible countries

Eligible countries are defined by the Ministry of Education and Research and operationalized by SIU. As illustrated in the previous chapter, this list has changed over time, and in light of geopolitical development and policy interests.

Over time, countries important to Norwegian foreign policy and trade seem to have been added to the list. Most notably, China is included and defined under the category of developing countries, and Russia and South Africa were added in 2008 as interest in BRICS countries moved to the top of the global trade and foreign policy agenda.

From the fall of 2004, the new EU members Estonia, Latvia, Lithuania, Poland, Slovakia, Slovenia, Czech Republic, and Hungary were removed from the list of eligible countries. This change made sense in light of these countries accessing the EU and becoming eligible a student mobility scheme with a strong development perspective.

A challenge when assessing relevance and monitoring impact of the Quota Scheme is the long list of eligible countries and consequently the large spread of students. As shown in chapter 2.4.1, quota students were spread across 75 countries of origin in the academic year 2012-2013, with many only sending single-digit students, often to several differ-

ent institutions. One could argue that higher concentration might allow for stronger monitoring of needs, results, return, and even incentivize investments in joint degrees or sandwich programmes or stronger partnerships.

### 3.1.9 Gender aspects

Gender is a key cross-cutting priority in Norwegian development cooperation. The only reference to gender which can indirectly be related to the Quota Scheme is in the latest budget proposal by the Ministry of Foreign Affairs, stating as a general requirement that nearly 50 percent of the students receiving financial support to higher education are to be female (Prop. 1 S 2013-2014). The provision for “free-movers” outside institutional collaboration is also in place to enable recruitment of female students – or other disenfranchised groups, as necessary.

While approximately half of the quota students, per year and over time, are female, gender distribution varies by country of origin and field of study. Numbers are presented in section 2.4.3.

The evaluation has not found any specific efforts to integrate gender aspects across the Quota Scheme. Certain programmes, such as international health or peace studies, include gender as an important and explicit dimension. However, the Quota Scheme has had no resources, mandate or tools for improving the actual gender focus or relevance of what is being studied and taught.

## 3.2 Strong rationale for strengthening internationalisation of Norwegian institutions

The second objective of the Quota Scheme is to “promote(s) the internationalisation of higher education in Norway”.<sup>19</sup>

This chapter reviews Norwegian policies on internationalisation of higher education and reviews the Quota Scheme design in light of these policies. Specifically, the chapter discusses three aspects of relevance: First, to what extent is the Quota Scheme aligned with Norwegian policy on internationalization of higher education? Second, how does the Quota Scheme fit with the participating institutions’ overall internationalization strategies? Third, how aligned is it with international experiences and how does it compare to similar schemes?

### 3.2.1 Internationalisation is increasingly important to higher education institutions

Education and research is increasingly part of a global market. Universities and university colleges must compete for the best faculty and students to deliver high quality education and research. Consequently, their relevance and quality in part depends on the ability to attract, absorb, create, and share international knowledge. Higher education institutions are increasingly competing over the best students, and internationalisation matters, both directly and indirectly. International exposure and opportunities can be used directly to attract students and indirectly to ensure academic relevance and quality. For example, a number of indicators on international research and partnerships are included in the global university rankings.

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<sup>19</sup> SIU Brochure on the Quota Scheme

As national economies become more interconnected and participation in education expands, governments and individuals are looking to higher education to broaden students' horizons. One way for students to expand their knowledge of other societies and languages, and thus improve their prospects in globalised sectors of the labour market, is to study in countries other than their own. In 2011, nearly 4.3 million students were enrolled in higher education outside their country of citizenship (OECD 2013).

*“The factors driving the general increase in student mobility range from the exploding demand for higher education worldwide and the perceived value of studying at prestigious post-secondary institutions abroad, to specific policies that aim to foster student mobility within a geographic region (as is the case in Europe), to government efforts to support students in studying specific fields that are growing rapidly in the country of origin. In addition, some countries and institutions undertake major marketing efforts to attract students from outside their boundaries”* (OECD 2013).

Part of the development can also be seen in the context of the increasing commercialisation of higher education, which has contributed to the development of an international education market with many stakeholders (St.meld. nr. 14 (2008-2009)). The market is characterised by various forms of demand and supply of education services across borders, including student and teacher mobility, and increasing use of tuition and fees.

Internationalisation efforts are instrumental to promote quality and relevance in higher education, and also increasingly part of overall strategies for these institutions. Softer values such as increased diversity and tolerance are also expected effects of increased internationalisation. As noted by Green

(2012), internationalisation is not an end in itself, but its rationale also goes beyond relevance and quality to encompass “producing globally aware and competent graduates” and “intercultural competent students” (ibid, pp. 2-3).

### **3.2.2 Norwegian internationalisation policies promote relevance, quality, and diversity**

Internationalisation is a priority in Norwegian education policy. The Quality Reform in higher education in Norway, launched in 2003, emphasised the need for increased internationalisation among Norwegian higher education institutions (St.meld. nr. 27 (2000-2001)). A Government White Paper on internationalisation followed in 2009 (St.meld. nr. 14 (2008-2009)) and specifically defined internationalisation of higher education as a means to increase relevance and quality. An internationally oriented education, with high quality and relevance, would promote Norway as a knowledge-based economy and an attractive collaboration partner. The White Paper on internationalisation emphasised globalisation and competition as motivating factors, but also highlighted softer values including diversity, broader perspectives, and cultural inputs.

As result of internationalisation, competition and quasi-market mechanisms has been introduced in the public education sector in Norway, both in relation to the management of the sector in general, the resource allocation and financing of the sector, as well as in terms of stimulating quality in both research and education (Trondal og Stensaker 2001). For example, the financing of higher education institutions rewards student exchange.

The Ministry of Education and Research summarizes official priorities for higher education along the following dimensions:<sup>20</sup>

- Increase internationalisation in Norway by integrating the international perspective at every level in Norwegian universities and university colleges
- Stimulate development of joint degrees and joint programmes with institutions in other countries at master's and PhD level
- Stimulate mobility of students and researchers, both from and to Norway
- Facilitate international students and employees at Norwegian institutions

In addition, there is a particular rationale for promoting internationalisation specifically targeting developing and emerging economies. The Government policy on internationalisation has also specifically highlighted the value of collaboration with developing and emerging economies, including the BRICS countries, as a means to promote cultural understanding and solidarity through increased knowledge and experience and through language skills. Producing “globally aware graduates” could entail expanding the international view beyond Europe and the US. To higher education institutions and their faculty, there are stronger incentives in place to collaborate with institutions in developed countries, especially globally renowned universities where joint and meriting publications.

These are objectives at different levels, some easier to monitor and measure than others. The Ministry and the higher education sector as a whole have a number of programmes and activities to underpin these four overall objectives.

The alignment of the Quota Scheme with the stated priority areas would be strongest and most direct for the objective of facilitating international students and employees at Norwegian institutions. It is obvious that the Quota Scheme does facilitate international students, although the Scheme is not relevant in facilitating international employees.

The Quota Scheme is also possibly relevant to other dimensions of internationalisation dimensions, discussed in the below.

### Integrating new perspectives

In principle, quota students can bring new perspectives into education programmes. When these contributions are limited to inputs from individual students, a critical mass of students is likely necessary for them to influence perspectives among fellows students and faculty. The Ministry has specified that courses offered to quota students must also be open to other students, which makes sense in view of objectives to promote integration and diversity. Yet most courses have only very few quota students. Given that the number of quota students per course – and institution - is relatively low, it is, however, reason to suppose that each student only will achieve limited impact when it comes to relevance and quality.

At the same time, there may be reason to believe that this will vary from institution to institution and from subject to subject. From interviews with faculty on an institute level, there are two factors that may enable quota students to contribute new perspectives and add relevance and quality to courses and institutions.

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<sup>20</sup> [http://www.regjeringen.no/nb/dep/kd/tema/internasjonalt\\_samarbeid\\_om\\_utdanning\\_og/artikler/kunnskapsdepartementets-internasjonale-s.html?id=628280](http://www.regjeringen.no/nb/dep/kd/tema/internasjonalt_samarbeid_om_utdanning_og/artikler/kunnskapsdepartementets-internasjonale-s.html?id=628280)

The first is in development-oriented studies, where the Norwegian institute has clear advantage of students from a developing country. These include international public health, international peace studies, and a number of agriculture and animal breeding programmes specialising in developing contexts. Norwegian institutions report that quota students typically bring valuable context and experience to these studies. In many cases, because of the development focus these institutions often also have extensive partnerships with universities in developing countries.

The second category is from highly qualified students that have a high prior academic level, and that are able to publish and do research at their host institutions. From the bibliometric analysis, it is clear that the nationality with the strongest publishing performance are the Chinese students.

#### Stimulate joint degrees

Unlike other similar programmes internationally, the Quota Scheme does not require the development of specific new courses, sandwich programmes or joint degrees. Joint degrees and sandwich programmes are encouraged but not required. This aspect is further discussed in sections 3.1.7, 3.2.3 and 4.2.

#### Stimulate mobility of students and researchers

The Quota Scheme does promote mobility, but primarily only in terms of international students coming *in*. This could be seen as a contribution to balancing the student exchange since Norwegian higher education institutions typically export more students than they import.

### 3.2.3 Relevance to institutions' own internationalisation strategies

Internationalisation has moved up among the top strategic items on the agendas of most higher education institutions. Already in 2006, a survey by the International Association of Universities (IAU) found that 73 percent of the participating higher education institutions assigned high priority to internationalisation (Knight 2006). Aspects of internationalisation are important to recruitment strategies and are reflected in a number of international rankings.

#### Few linkages to overall internationalisation strategies.

In interviews for this evaluation, both institute level faculty and management of Norwegian universities and university colleges were asked to comment on the relevance of the Quota Scheme to these challenges. Across the large majority of institutions the responses were similar: The Quota Scheme is seen as a welcome supplement to institutional strategies, but does not influence priorities and is not particularly influenced by them either. For most of them, internationalisation strategies are conceived and executed independently of the Quota Scheme.

To institutions with strong partnerships with universities in developing countries, notably the University of Bergen and the University of Life Sciences, the role of the Quota Scheme is more visibly underpinning broader programmes. Interviewed staff and faculty across different types of institutions note that the Quota Scheme adds value to existing partnerships but hardly stimulates partnerships by itself.

When staff at all levels still come out quite strongly in defence of the Quota Scheme, it is not because removing it would significantly affect their institutions. Instead, many see the scheme as an important instrument to contribute to a global common good.

### Localized efforts and committed individuals

Typically, the Quota Scheme is closely followed and frequently used by a relatively small number of committed individuals on an institute level. Localized pockets of faculty fill up the quota student slots, not overall institutional strategies. Interestingly, this localized approach is not unique to the Quota Scheme. An important limitation to internationalisation noted in the above-referenced White paper relates to weak linkages between localized initiatives and overall institutional strategies. Evaluations have indicated that internationalisation efforts on an institutional level rarely capture and reflect efforts and priorities made by institutes and faculty, and vice versa. Internationalisation efforts tend to be concentrated in defined pockets, often driven by committed and idealistic individuals, partly idealistically motivated (St.meld. nr. 14 (2008-2009)).

### More important to smaller than larger institutions

Smaller institutions typically assign greater importance to the Quota Scheme than larger ones. An advantage of the Quota Scheme noted in particular by the smaller university colleges interviewed is that it is available to all Norwegian universities and university colleges. Since the introduction of The Norwegian Programme for Capacity Development in Higher Education (NORHED) launched in 2013, internationalisation opportunities specifically related to developing countries have become more competitive and more concentrated. In light of this, several of the institutions indicate that they believe the Quota Scheme will be more important to them in the future. For small institutions, the Quota Scheme clearly also makes them attractive for international students in a way that they would not otherwise experience.

### Limited linkages with other efforts

SIU has administrative responsibility for several programmes and schemes that in different ways support internationalisation in education and capacity building in developing countries. The programmes have different funding sources, including Ministry of Education and Research and the Ministry of Foreign Affairs.

An example of a programme covering one quota country, but with a clear goal of internationalisation to strengthen relevance and quality, is the High North Programme.<sup>21</sup> The High North Programme is an example of a fellowship programme with a clear goal of improving the relevance and quality in education, through expansion, strengthening and dissemination of knowledge about or relevant to the High North.<sup>22</sup> By specifying thematic areas, the programme also puts a stronger emphasis on academic development, inherently on relevance. The programme supports cooperation between higher education institutions in Norway and institutions in Canada, Japan, Russia, the Republic of Korea and the United States. The goal is to expand, strengthen and disseminate knowledge about or relevant to the High North. Compared to the Quota Scheme however, the High North Programme has a stronger emphasis on and financing for partnerships between institutions. The Ministry of Foreign Affairs is responsible for the High North Programme.

The Norwegian Cooperation Programme in Higher Education with Eurasia, which also the Ministry of Foreign Affairs is responsible for, covering both former and present countries under the Quota

<sup>21</sup> <http://www.siu.no/eng/Front-Page/Global-menu/For-the-media/News/New-funds-for-High-North-cooperation>

<sup>22</sup> <http://www.siu.no/eng/Front-Page/Global-menu/For-the-media/News/New-funds-for-High-North-cooperation>

Scheme.<sup>23</sup> The programme supports project cooperation between Norwegian institutions and institutions in Armenia, Azerbaijan, Belarus, Georgia, Kazakhstan, Kyrgyzstan, Moldova, Tajikistan, Turkmenistan, Ukraine and Uzbekistan. The overall goal of the programme is to contribute to renewal and internationalisation of higher education in the cooperating countries. One part of the programme concerns project cooperation between educational institutions in Norway and in Eurasia. Another part concerns a scholarship programme.

In interviews with Norwegian higher education institutions, there seemed to be limited view on how these programmes and the Quota Scheme could complement each other.

### 3.2.4 Relevant international parallels

Internationally, the programmes with most resemblance to the Quota Scheme are the Erasmus Mundus Scholarships for Developing Countries and the Commonwealth Scholarship. Both have a much stronger emphasis on internationalisation through joint degrees.

The **Erasmus Mundus Scholarships for Developing Countries** is a cooperation and mobility programme offered by the EU, covering fully-funded scholarships for master's and PhD programmes to European students and students from developing countries.<sup>24</sup> The programme also includes the ability for institutions to apply for a one-year funding to plan and establish joint degrees.

The overall goals of the programme are quality in European higher education, promoting the EU as a centre of excellence in learning around the world, and promoting intercultural understanding through cooperation with third countries as well as for the development of third countries in the field of higher education. The programme supports the development of joint degrees and provides scholarships for students of these joint degrees. Higher education institutions apply jointly, and students apply to the institutions. Unlike the Quota Scheme, the Erasmus Mundus programme's primary objective is to increase attractiveness of European universities. The window extending scholarship to so-called third country students (from outside the EU), is a relatively recent addition. The scholarship for third country students is higher than the regular scholarship. The evaluation of the programme for the period 2004-2008 was overall positive. Some of the main findings were:<sup>25</sup>

- The master programmes were considered to be of high quality
- The programme managed to attract a large number of applications from third-country students
- There was a balanced geographical distribution of participating institutions but new EU member states were proportionally under-represented
- High academic level and content (two factors that added value over and above mainstream or domestic master's courses in the same discipline)
- More could have been done to improve coherence between the curricula taught at different

<sup>23</sup> <http://siu.no/index.php/eng/Front-Page/Programme-information/BRICS-Eurasia-and-the-High-North/Eurasia>

<sup>24</sup> [http://eacea.ec.europa.eu/erasmus\\_mundus/](http://eacea.ec.europa.eu/erasmus_mundus/)

[http://eacea.ec.europa.eu/erasmus\\_mundus/programme/documents/2014/em\\_programmeguide\\_nov2013\\_en.pdf](http://eacea.ec.europa.eu/erasmus_mundus/programme/documents/2014/em_programmeguide_nov2013_en.pdf)

<http://www.scholars4dev.com/2979/erasmus-mundus-scholarships-for-developing-countries/>

<sup>25</sup> <http://www.universityworldnews.com/article.php?story=20100128200104788>

participating institutions and the different training paths offered to students

- More structured formats, with common courses and a more limited numbers of study to facilitate course integration

The interim evaluation for the period 2009-2013 was also positive in many areas.<sup>26</sup> The report pointed out that the programme is: “(...) *fostering necessary legislation for the recognition of joint degrees and in promoting the adoption of European and international standards (quality assurance, credit and mobility recognition) among the third countries, where it was not present before. (...) EM II created a unique impetus for participating HEIs<sup>27</sup> to seek changes in legal regulation of joint degree recognition by laying down formal requirements for potential recipients of funding*” (PPMI 2012).

The evaluation also found that the programme attracted students and staff, who were interested in comparing countries both academically, culturally and socially. “*The motivation to learn about the culture and lifestyle of other countries, practice a foreign language and immerse oneself in a European education system was by far the dominant answer to an open question on motivation in the survey (...)*” (PPMI 2012). The programme also enhanced the visibility and awareness of shared European approaches and methods in higher education in third countries. Finally, the Erasmus Mundus was found to contribute to European competitive advantage.

The evaluation found, however, that it was difficult achieving similar practices across different institutions and countries, and the challenges were especially large when it came to PhD programmes.

Norwegian institutions offering Erasmus Mundus programmes receive funding directly from the EU. Institutions are administrative responsible for the grants, including the students’ grants. One Norwegian institution has established a bank account where self-funded students can insert money, c.f. the requirement that self-funded international students have to prove that they have just under NOK 100.000 to get at a permission to study in Norway. The students get the money back from the institution when they come to Norway. This helps to ensure that students do not need to establish a Norwegian bank account before they move to Norway.

The Commonwealth Scholarship Commission in the United Kingdom is responsible for managing Britain’s contribution to the **Commonwealth Scholarship and Fellowship Plan**. Since 1960, the Commission has offered nine programmes. The main objectives for the scholarships and fellowships are to create and sustain productive links between the higher education sector and development processes in low and middle income countries through giving scholarships and fellowships to individuals (students and staff). Eligible degrees must be of “*demonstrable relevance*” to the student’s home country (Commonwealth Scholarships 2012).

Some of the main findings from a recent self-evaluation survey of the Commonwealth Scholarship Commission’s activity are:

- Although Commonwealth Scholarships and Fellowships are given to individuals, they have a demonstrable impact on higher education – both institutions and the sector as a whole.

<sup>26</sup> <http://www.borbolycsaba.ro/ro/wp-content/uploads/2013/09/Interim-Evaluation-of-Erasmus-Mundus-II.pdf>

<sup>27</sup> HEI = Higher Education Institutions

- The programme is well placed to have an impact on higher education and to work in partnership with overseas higher education institutions.
- There is evidence of continuing collaboration between host and home institutions after awards have ended.
- The Scholarships and Fellowships do not lead to brain drain from developing countries. Alumni return to their home universities.

NFP to wider socio-economic development. A number of anecdotal cases point to likely wider impact in several fields, however.

### ***The Netherlands Fellowship Programme (NFP)***

has been evaluated twice (Ecorys 2007, 2012). The general objective of the NFP is to help alleviate quantitative and qualitative shortage of skilled manpower at mid-career level, in the context of capacity building within the framework of poverty reduction in developing countries. The evaluations found that the multi-year agreements with institutions as the programme has resulted in was seen as useful, and a reduction in eligible countries from 126 to 50 was also important for getting results. Furthermore, almost 90 percent of the students surveyed returned to their employer after completing their NFP education, though in a couple of countries there was evidence of occasional brain drain at the organisation level.

As far as networking and larger societal impacts from the fellowship training, graduates stayed in contact with fellow NFP students, teachers and other foreign students whom they had met during their NFP period. Yet there were few contacts with non-academic organisations such as businesses and government organisations. The PhD students in particular were focused on future research and their work at universities. There was thus little evidence of larger contributions of the NFP to socio-economic developments in the countries, though this is in part due to the absence of an intervention logic and relevant indicators to track possible contributions of

## 4 Effectiveness

*Abstract: The Quota Scheme contributes to capacity building among the quota students, with a significant number of completed degrees, mostly on a master's level. These degrees enable students to advance their academic careers and get better jobs. Return rates are high and higher for students from developing countries than for other quota students. Effects on universities in developing countries are more anecdotal and mostly through increased capacity among individual students who return to work in the university sector. Effects on Norwegian institutions are mainly on an institute level. In its early years, as the Quota Scheme contributed to establishing valuable courses taught in English. Since then the Quota Scheme has had limited impact on internationalisation parameters such as integrating international aspects or developing new or joint degrees. Overall, development effects are higher than internationalisation effects.*

This chapter presents effects of the Quota Scheme and discusses the compatibility of the dual objectives. The objectives of the Quota Scheme are to “provide relevant education that will benefit the students’ home countries when they return” and “promote(s) the internationalisation of higher education in Norway (...)”.<sup>28</sup>

This chapter assesses effectiveness for both objectives, first on development and subsequently on internationalisation.

### 4.1 Development effects

A commonly used approach to the evaluation of learning outcomes in individuals and institutions/organisations today is Kirkpatrick’s “four levels”

framework. This evaluation model delineates four levels of training outcomes: *reaction*, *learning*, *behaviour*, and *results*, as illustrated in the triangle below (Kirkpatrick, 2006). In our evaluation framework, this triangle nuances the effectiveness discussion by differentiating between levels of capacity building. A parallel distinction more commonly used in evaluations is between outputs, outcomes, and impact. In the latter framework, mere participation in capacity building activity is an output, learning something from the activity is an outcome, while applying skills to lift quality of universities or other institutions at home would be an impact. Kirkpatrick’s model is specifically tailored for learning outputs and outcomes and hence more useful for this specific discussion.

FIGURE 4.1  
Assessing learning outcomes



Source: Kirkpatrick, D. L. and Kirkpatrick J.D. (2006). *Evaluating Training Programs (3<sup>rd</sup> ed.)*. San Francisco, CA: Berrett-Koehler Publishers

1. The first level goes beyond the actual participation, since this is a given with the 1,100 quotas each year. The evaluation also assesses student’s *reactions* to and opinions the quality of

<sup>28</sup> SIU’s brochure on the Quota Scheme

the Quota Scheme, academically, socially, and administratively.

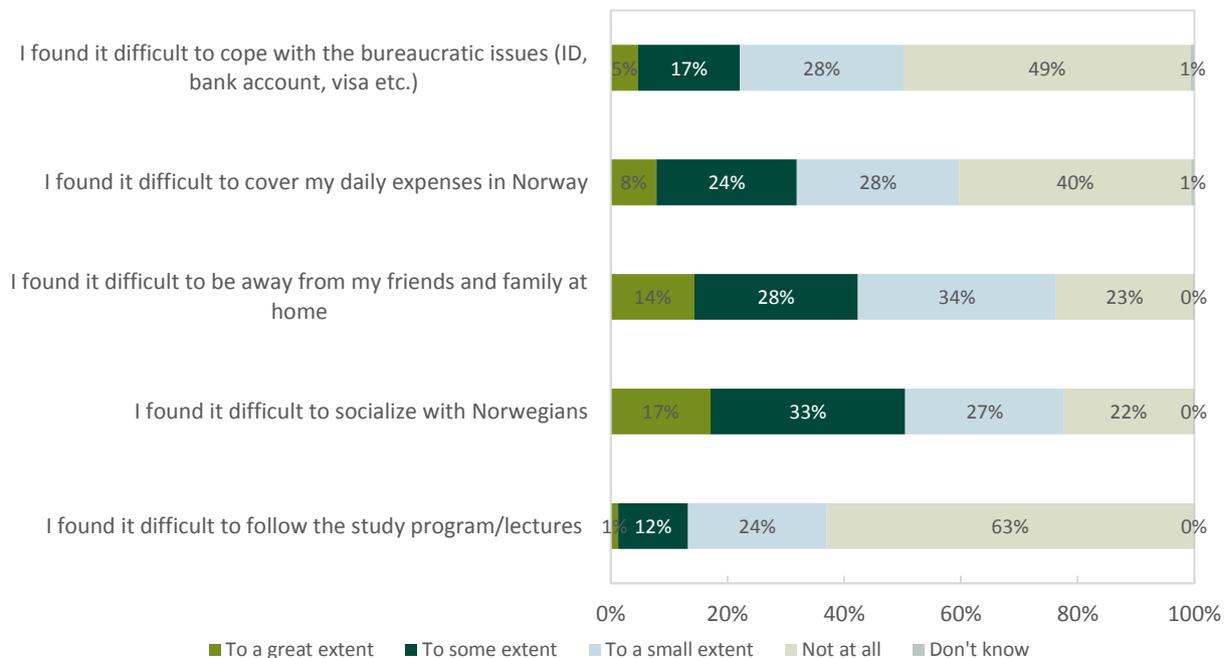
2. *Learning* measures are quantifiable indicators of the learning that has taken place. The main indicator of acquired skills in higher education is that students successfully pass their exams and receive diplomas.
3. The third level, *behaviour*, addresses whether students apply skills and are able to improve their own performance as a result.
4. Finally, level four, *results*, measure the impact of applying skills on institutions, in this case impact on universities in the students' home country.

#### 4.1.1 Reactions

With few exceptions, the feedback from former as well as current quota students is overwhelmingly positive. Students are satisfied with the Quota Scheme, with the reception in Norway, with the assistance provided to them by their host institutions, and the courses followed.

Building an international network through studies is also a potential result. Asked about what they experienced as the most difficult part of being a quota student, the most frequent response is the difficulty in socialising with Norwegians. Interviews with Norwegian institutions partly confirm this and Norwegian institutions report that Quota Students often become close-knit groups among themselves, but more rarely integrate with the broader student body.

**FIGURE 4.2**  
Quota students' personal experience



Source: DAMVAD  
Note: N=1,276

Lack of integration on campus would constitute a certain limitation to the internationalisation objective. Figure 4.2 illustrates this feedback.

#### 4.1.2 Learning

A straightforward indicator of learning in an academic context is a completed degree. Since the establishment of the Quota Scheme in 1994, 4,545 students have completed at least one degree under the scheme.<sup>29</sup> Of these, 78.5 percent (3,567 students) have completed a master's degree, 11.2 percent (507 students) have completed a PhD while 10.4 (471 students) have completed a bachelor's degree. In the same period, 176 students have completed two degrees. Our data further indicate that 1,008 students have not finished a degree, but half of these started their studies in 2011 or 2012 hence cannot be expected to have completed yet.

#### 4.1.3 Behaviour

An indicator of how knowledge is applied would be students' ability to find jobs, after completed studies, where they can apply their skills. Across all students, a large majority report that the Quota Scheme enabled them to get a job they otherwise would not get, or facilitated their academic progression.

##### Former students apply their skills in relevant jobs

The survey indicates that students have been able to get better jobs and do better in their jobs as a result of the degree from Norway. In the survey, 69 percent report that the quota studies to a large (37 percent) or some extent (32 percent) enabled them to get a job they otherwise would not get. Further, 91 percent reported that the Quota Scheme to a

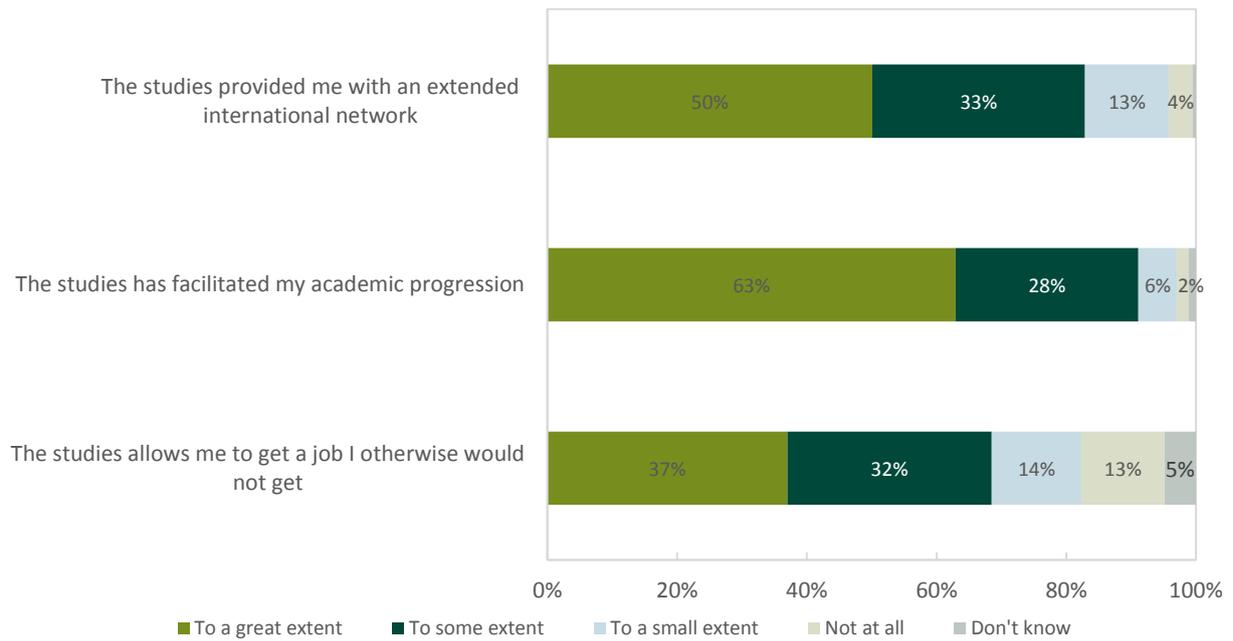
large (63 percent) or to some extent (28 percent) facilitated their academic progress.

A majority of former quota students also report that the degree has contributed to advancing their career and contributing to the quality of work that they perform. (cf. figure 4.3 and figure 4.4).

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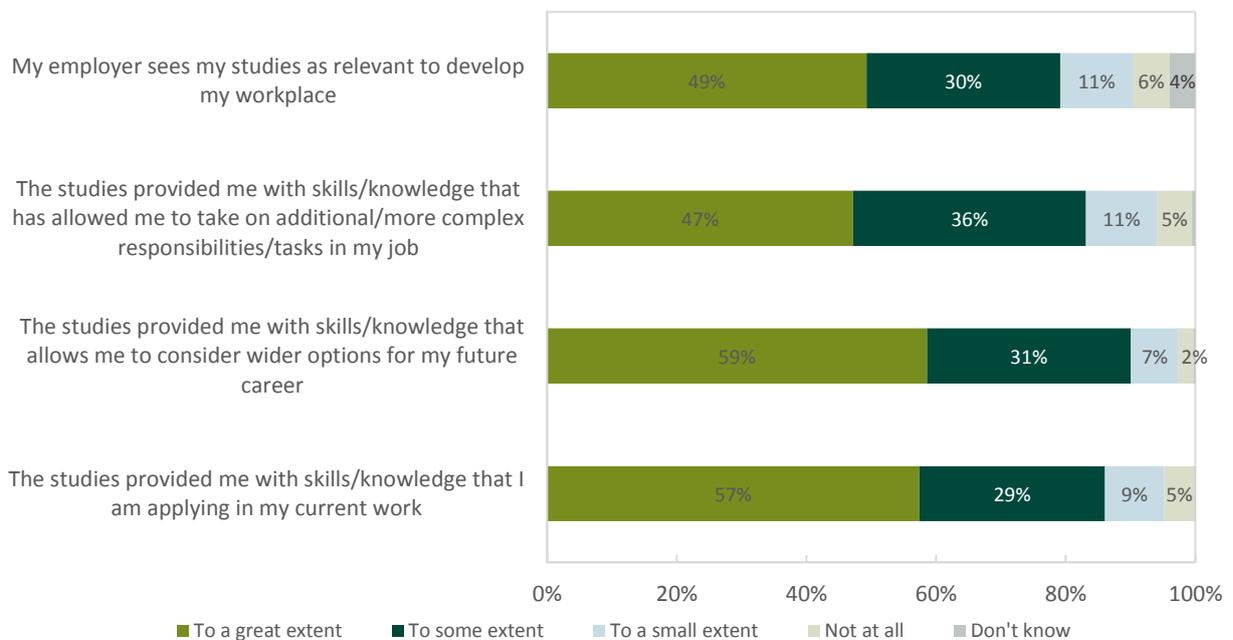
<sup>29</sup> See annex 3 for our definition of completion of a degree

**FIGURE 4.3**  
Former Quota students' assessment of impact



Source: DAMVAD  
Note: N=1,276

**FIGURE 4.4**  
Applying skills



Source: DAMVAD  
Note: N=930

### High return rates

An important aspect to assess the extent to which learning is applied for development purposes is the rate of return upon completed studies. While tracing all students is difficult, the survey and registry data, supplemented with the LinkedIn analysis, provide relatively strong indications that return rates are high.

In order to assess the return rate we looked at individuals no longer registered as active students by the Norwegian State Educational Loan Fund in 2012. This applies to 4,545 quota students. Of these, 67.4 percent have left Norway of which 62.1 of the female and 71.8 of the male have left Norway. It is important to notice that we cannot see from these data if they have returned to their home country or not. From the beginning of the 2000s, the return rate of quota students per year has been relatively stable. On average, approximately 280 students have left Norway each year.

The survey indicate that about half of the students had returned home to their home country, where 50.9 percent of male and 43.1 percent of female students report that they are currently living in their country of origin. A number of factors can help explain the differences. The most important is that Chinese quota students are less likely to respond to the survey, but more likely to return home compared to other nationalities. Since the total number of Chinese students is high, this impacts on the survey results. Also, survey responses are likely somewhat skewed in favour of students remaining in Norway. If students returning have changed contact information or have limited access to stable internet connections this would limit the survey's outreach and their ability to respond, respectively.

**FIGUR 4.3**  
Return by country

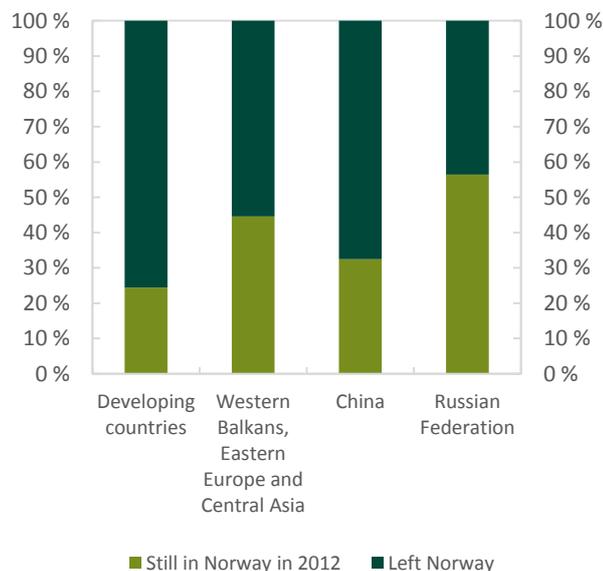
Country of origin	Still in Norway in 2012	Left Norway	Total	Left Norway (pct.)
Russland	344	266	610	43.6 %
Kina	183	381	564	67.6 %
Etiopia	128	263	391	67.3 %
Ghana	78	310	388	79.9 %
Tanzania	32	210	242	86.8 %
Uganda	40	186	226	82.3 %
Nepal	50	139	189	73.5 %
Indonesia	31	67	98	68.4 %
Zambia	14	77	91	84.6 %
Serbia	43	40	83	48.2 %
Kenya	20	61	81	75.3 %
Romania	31	49	80	61.3 %
Bangladesh	20	59	79	74.7 %
Ukraina	35	40	75	53.3 %
Kamerun	14	55	69	79.7 %
Vietnam	26	39	65	60.0 %
India	21	41	62	66.1 %
Sri Lanka	19	43	62	69.4 %
Pakistan	22	33	55	60.0 %
Zimbabwe	6	48	54	88.9 %
Litauen	26	24	50	48.0 %
Sør-Afrika	9	38	47	80.9 %
Sudan	10	35	45	77.8 %
Latvia	13	28	41	68.3 %
Malawi	6	31	37	83.8 %
Colombia	8	27	35	77.1 %
Kosovo	14	16	30	53.3 %
Nigeria	10	20	30	66.7 %
Palestina	10	17	27	63.0 %
Georgia	11	15	26	57.7 %
Namibia	3	23	26	88.5 %
Aserbajdsjan	11	14	25	56.0 %
Hviterussland	16	8	24	33.3 %
Bulgaria	8	15	23	65.2 %
Tsjekkia	6	17	23	73.9 %
Estland	5	15	20	75.0 %
Slovakia	7	13	20	65.0 %

Source: The Norwegian State Educational Loan Fund and Statistics Norway

Close to six percent of the respondents to the survey say that they are currently living in another country (not Norway nor their home country). From the registry data, it is not possible to track where individuals reside after leaving Norway.

The return rate is highest among former quota students from developing countries (75.6 percent). In comparison, only 55.5 percent of the students from Western Balkans, Eastern Europe and Central Asia had left Norway by 2012, while this applied for only 43.5 percent of students from Russia (see figure 4.5).

**FIGURE 4.5**  
Return rate by country category



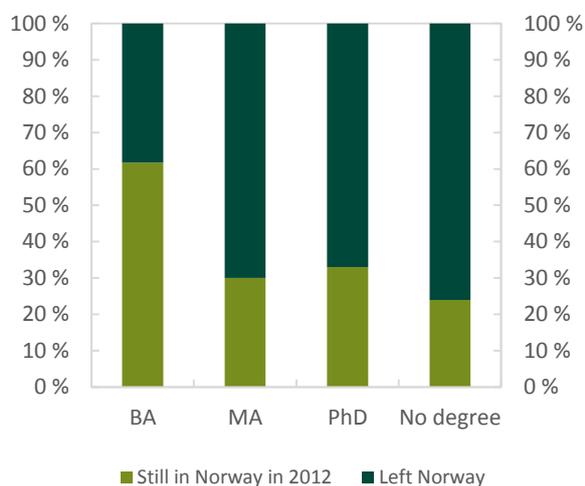
Sources: The Norwegian State Educational Loan Fund and Statistics Norway

There are also some differences in the return rate with the respect to gender and to the level and field of education.

The return rate among male students is higher (71.8 percent) than for female students (62.1 percent).

Of those with a master's degree as their highest level of education, 70 percent have left Norway. Further, the return rate for those with a PhD or bachelor's degree as their highest level of education is 67 and 38 percent respectively. Some of the students not active in 2012 have not completed a degree. More than 75 percent of these individuals have left Norway (cf. figure 4.6).

**FIGURE 4.6**  
Return rate by highest level of education



Sources: The Norwegian State Educational Loan Fund and Statistics Norway

With respect to field of education, the highest return rate is among those who have studied social sciences and law (79.4 percent), education (79.3 percent), and humanities and arts (74.6 percent). In comparison, quota students with natural sciences, vocational training and technical subjects as their field of study have the lowest return rate at 57.5 percent.

According to the survey, career opportunities, quality of life, family/personal reasons or the intention to gain more international experience are the main reasons for staying.

Career opportunities rank marginally higher than the three other factors as a motivator for staying in Norway. Of those working in Norway, 30 percent report that they are employed in the energy sector, or industry/manufacturing. The LinkedIn study further indicates that the latter group primarily works in the petroleum sector.

The survey show that quota students returning to their home country primarily work at universities and in the health sector. In the survey, 79 percent of the former quota students now residing in their home country report that they are working, while 9 percent are still studying. Of those working, 55 percent work in the public sector and 28 in private sector. Of those working, 38 percent work in the tertiary education sector, followed by the health sector at 10 percent.

Our data indicates that the return rate is higher among the male than for the female quota students. Of those no longer active under the Quota Scheme in 2012, 2,508 are men. Nearly 72 percent of them have now left Norway, whereas 62 percent of the women have left Norway.

We know the marital status for 1,441 of the 1,480 former quota students that still live in Norway (in 2012).<sup>30</sup> There seem to be little explanatory power in whether marriage affects whether students leave Norway. Half of individuals reporting to still be in Norway are registered as a “one-person household”. The other half are either registered as “married couple without child(ren)”, “married couple with child(ren)” or “cohabitation with child(ren)”. These shares vary slightly with country of origin but not enough to explain the differences in the return rate.

<sup>30</sup> We cannot see the marital status for those who have left Norway

Of those having completed their quota studies but still residing in Norway, 25 percent report that they still study.

#### 4.1.4 Results

Academically, an important indicator of results would be whether individual quota students reach sufficient research capacity levels to publish peer-reviewed articles. Through a bibliometric analysis, the evaluation has matched the names of quota students with publications by the involved Norwegian universities and university colleges. The University of Oslo tops the list of Norwegian institutions publishing with quota students, followed by the University of Bergen. The only university college with registered publications where quota students are co-authors is Oslo University College<sup>31</sup>. Table 4.1 presents the numbers.

**TABLE 4.1**  
Numbers of publications with quota students as co-authors

Institution	No. of publications
University of Oslo	110
University of Bergen	49
University of Tromsø	2
Norwegian University of Science and Technology	15
Norwegian University of Life Sciences	13
Oslo University college	3

Source: DAMVAD and Scopus

<sup>31</sup> The analysis operates with Oslo University College and Akershus University College as two separate institutions. The two institutions merged in 2011.

The co-authoring quota students are typically from the more developed countries, with Chinese students dominating the list. A notable exception is the Norwegian University of Life Sciences, with quota co-authors from a broader range of countries also including Ethiopia, Mali, Tanzania, and Nepal. Table 4.2 summarises the distribution.

According to the guidelines in the Ministry of Education and Research's circular (Kunnskapsdepartementet 2013) quota students shall normally be recruited through established partnership agreements between the Norwegian institutions and an institutions or equivalent in the quota student's home country. This must be seen in connection to the objective that the scheme shall contribute to capacity building in the quota countries and that the scheme is an instrument in the overall internationalisation policy of Norwegian institutions, including emphasis on institutional partnership. With 38 percent of those returning home working in tertiary education, there are indications that the Quota Schemes at least contributes to human resource development at universities in developing countries and other eligible countries.

Interviewed partner institutions in developing countries are generally positive to the contribution of the Quota Scheme in terms of building individual capacity of high quality. Conversely, Norwegian faculty members typically note that the quota students are committed, dedicated, hardworking and conscientious, but also that they often lack necessary prequalifications, especially in critical thinking and rigorous methodology. They commend the Norwegian master's degrees on their academic standards, comparing positively with a number of the Anglophone universities where reportedly discipline and standards were lacking.

The Norwegian master's degrees also often include a research component, which is highly appreciated. Especially, the possibility to get a travel grant during the summer between the two years and the incentives to conduct fieldwork in their home countries is believed to increase the relevance of the research carried out, and the likelihood of return. Students reportedly return with a different approach to study and research: more critical and analytical in their thinking, and more open to collaborative work. According to these institutions, the share of students returning is higher than for students receiving fellowships to the traditional Anglophone universities.

The evaluation does not explicitly measure effects on economic development in eligible countries. Even a positive impact on economic development would be marginal compared to all other efforts over the years covered by the evaluation. The analysis of results on a country level largely follows from the relevance discussion, in the sense that the more robust a programme design, the more likely planned activities and direct results are to generate the desired indirect effects.

## 4.2 Internationalisation effects

The Quota Scheme aims to strengthen internationalisation of Norwegian institutions for higher education. This chapter assesses effects on internationalisation along a proposed set of parameters.

### 4.2.1 How to measure internationalisation?

Measuring internationalisation is an evolving field, and relevant indicators range from input indicators such as hours and resources spent on internationalisation efforts, all the way to measuring international rankings and learning outcomes. As noted by de Wit et al (2009), relevant indicators of success depend on the strategies and ambitions of each institution. Ultimately, the goals of internationalisation intrinsically link to the overall goal of the institution.

The Center for Higher Education Development in Berlin has identified 180 indicators to select from that measure internationalisation on different levels (input, resources, and output) and along different dimensions (studies, research, and administration).

Input indicators would typically include the level of international experience among professors and young lecturers, as well as full time equivalents (FTE) spent on facilitating international mobility and partnerships. Resources include international networks, research projects, and curricula (proportion of courses taught in another language, number of mobility windows incorporated in selected curricula etc). Outputs indicators measure research findings/publications, graduates, and international reputation. Green (2012) distinguishes between inputs, outputs and outcomes, and provides a sample set of indicators for each (Green 2012, p. 6).

**TABLE 4.2**  
The share joint publications by quota country and Norwegian institutions

Institution	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
<b>University of Oslo</b>	China (37.80 pct.)	Brazil (3.49 pct.)	Tanzania (1.91 pct.)	Russia (1.84 pct.)	Georgia (1.38 pct.)
<b>University of Bergen</b>	China (15.21 pct.)	Iran (6.69 pct.)	India (2.36 pct.)	South Africa (2.16 pct.)	Zambia (1.97 pct.)
<b>University of Tromsø</b>	South Africa (16.67 pct.)	China (7.14 pct.)	-	-	-
<b>Norwegian University of Science and Technology</b>	China (26.50 pct.)	India (5.90 pct.)	Azerbaijan (2.88 pct.)	Russia (2.64 pct.)	Iran (0.96 pct.)
<b>Norwegian University of Life Sciences</b>	Nepal (8.27 pct.)	China (4.76 pct.)	Tanzania (4.18 pct.)	Ethiopia (2.27 pct.)	Mali (2.27 pct.)
<b>Oslo University College</b>	China (24.07 pct.)	-	-	-	-

Source: DAMVAD

These measuring frameworks are well suited to measuring overall progress on an institutional level. They would not be able to attribute identified changes to one specific effort. Overall, the number of publications jointly published between a Norwegian higher education institution and a university on one of the countries eligible under the Quota Scheme increased from 239 in 2003 to 658 in 2013 (DAMVAD 2013). The number of Norwegian stu-

dents taking parts of their degree abroad has increased, as has the number of international students in Norway (St. meld 14 2008-2009, p. 58-59). International perspectives may increase as a consequence of a number of factors, and increased mobility may influence an equally large number of developments.

**TABLE 4.3**  
Selected goals and indicators

Goal	Input	Output	Outcome
<b>Strengthen international dimensions of curriculum</b>	<ul style="list-style-type: none"> <li>- Number and quality of courses with international/global focus</li> <li>- Number and range of foreign language courses</li> <li>- Number of joint or dual degree programs</li> </ul>	<ul style="list-style-type: none"> <li>- Number and proportion of Norwegian and international students enrolled in/ majoring in courses with international/global focus</li> </ul>	<ul style="list-style-type: none"> <li>- Career choices in international business or public service</li> </ul>
<b>Enhance quality of research</b>	<ul style="list-style-type: none"> <li>- Number of research projects with international partners</li> <li>- International funding sources for research</li> <li>- Share of research staff with international experience</li> </ul>	<ul style="list-style-type: none"> <li>- Number of publications per faculty co-authored with international partners</li> </ul>	<ul style="list-style-type: none"> <li>- Enhanced institutional reputation and recognition for international character and work</li> <li>- Increased student interest in international programmes and activities as evidenced by course enrolment patterns</li> </ul>
<b>Increasing diversity and international outlook</b>	<ul style="list-style-type: none"> <li>- Number of international students and faculty on campus</li> </ul>	<ul style="list-style-type: none"> <li>- Number of extra-curricular outreach activities and internationally oriented cultural events</li> </ul>	<ul style="list-style-type: none"> <li>- Demonstrated specific student learning outcomes as evidenced by portfolios, intercultural competency inventories</li> </ul>

Source: Green (2012), adapted by DAMVAD

Note: Indicators are sampled to illustrate the framework and do not represent a holistic view of internationalisation

To structure the findings and align them both with official Norwegian goals and international measuring standards, a framework is proposed in table 4.3 covering three areas: curriculum/ learning, research, and diversity/ tolerance. In this framework, the quota Scheme is a tool in broader internationalisation efforts, and could be expected to influence some of the input indicators.

To enable discussion of causality and attribution, the main source of how the Quota Scheme affects internationalisation have been interviews with both administration and management at selected Norwegian higher education institutions.

#### **4.2.2 Influence on integrating international perspectives**

It could be expected that bringing in 1100 students would also influence ideas and approaches, both as a means to attract international students in the first place, and as a result of their presence.

In its early stages, Norwegian higher education institutions report that the Quota Scheme stimulated the establishment of courses taught in English. These courses in turn contributed to attracting other international students. Over time, the Quota Scheme has played a less important role for the establishment of courses taught in English.

For certain types of courses, notably development-oriented studies, faculty report that quota students bring new and relevant perspectives. However, many of the institutes offering these types of courses already have broader partnerships in place and it is difficult to isolate the effect of the Quota Scheme. The effect is mostly on an institute level, but valuable nonetheless.

In various circulars (“rundskriv”), the Ministry of Education and Research has encouraged the development of joint degrees and sandwich programmes as part of the Quota Scheme. This is not a formal requirement, yet does represent an essential part of policy priorities. Consequently, while results of the Quota scheme cannot be assessed in terms of its contribution to new degrees alone, they would represent a tangible and important indicator of internationalisation effects. No joint degrees have been identified established as a result of or explicitly in view of recruiting students to the Quota Scheme. In a few cases, sandwich programmes have been reported established as a result of the scheme.

In interviews, Norwegian higher education institutions note that especially joint degrees are difficult and resource-intensive to establish, regardless of the Quota Scheme. One major challenge is the often large differences between Norwegian institutions and institutions in quota countries regarding education system, degree structures, and accreditation system.

In parallel with the Quota Scheme, SIU administers a separate joint degree facility where institutions can seek funding for development of such degrees. This fund is so far underused, and it has proven challenging both to mobilize applications and award funding. Stimulating joint degrees under the Quota Scheme would require more than a soft encouragement, likely also targeted support and funding. In comparison, the Erasmus Mundus programme has joint degrees as the core of the programme, with students routed directly and exclusively to these joint degrees. The latter programme allows funding for a one-year pilot project for planning and establishment of joint degrees.

### 4.2.3 Joint research mainly within other partnerships

The bibliometric survey carried out by the evaluation demonstrated an increase in research collaboration between 12 Norwegian higher education institutions and universities in countries eligible under the Quota Scheme. The analysis has used data from the abstract and citation database Scopus, which contains 50 million peer-reviewed records.

The analysis identified 7,196 publications produced in collaboration between researchers at one of the 12 Norwegian institutions, and at least one of the quota countries. The number of publications and hence the number of collaborations between institutions with university status and quota countries have

increased from 239 in 2003 to 658 in 2013. In other words, quantity and quality of research with an international dimension increased in the evaluation period.

The large majority of joint publications were with students and institutions from the BRICS. Norwegian institutions with university status publish primarily with the Russian Federation, China, Brazil, and South Africa, and the university colleges primarily collaborate with China, India and Brazil. There are a few exceptions, most importantly the Norwegian University of Life Sciences that publishes extensively with Ethiopian and Tanzanian universities, but also the University of Bergen. Institutions with university college status do not publish

**TABLE 4.4**  
Number of co-publications by country (top five countries). 2003-2013

Institution	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
<b>University of Oslo</b>	China (239)	Russia (130)	South Africa (72)	India (65)	Brazil (60)
<b>University of Bergen</b>	China (132)	Russia (99)	Tanzania (60)	South Africa (57)	India (53)
<b>University of Tromsø</b>	Russia (82)	China (46)	South Africa (28)	India (13)	Brazil (6)
<b>Norwegian University of Science and Technology</b>	China (198)	India (74)	Russia (52)	Brazil (32)	Iran (29)
<b>Norwegian University of Life Sciences</b>	Ethiopia (40)	China (24)	Tanzania (19)	Uganda (17)	Nepal (12)
<b>Oslo University College*</b>	China (4)	Brazil (2)	South Africa (2)	Armenia (1)	Russia (1)
<b>Akershus University College*</b>	Mali (2)	Brazil (2)	Pakistan (1)	Iran (1)	South Africa (1)
<b>Bodø University College</b>	Brazil (3)	Ghana (2)	China (1)	Thailand (1)	-
<b>Narvik University College</b>	Russia (7)	China (2)	India (2)	South Africa (1)	Thailand (1)
<b>Stord/Haugesund University College</b>	India (5)	Iran (2)	Pakistan (2)	Ukraine (1)	-
<b>Molde University College</b>	Brazil (1)	China (1)	-	-	-
<b>Diakonhjemmet University College</b>	Russia (1)	Zambia (1)	-	-	-

Source: DAMVAD and Scopus

\*Oslo University College and Akershus University College merged in 2011

nearly as much with quota countries as the universities. However, from 2003 and onwards the number of university college publications with quota countries increased from four to 132 in 2013.

From interviews, however, none of the institutions identified the Quota Scheme as the source behind increased international publications or research partnerships. Notably, the institutions in table 4.4 that publish most extensively with developing countries are also the institutions that have established research partnerships with universities in, for example, Tanzania and Ethiopia. To these institutions, quota students are a good supplement, but not crucial to the partnership. The analysis rather indicates that effects on international research are the result of long-term partnerships, not the Quota Scheme.

#### Impact on diversity

The third dimension is the softer parameter of diversity, tolerance or in the terminology of Green (2012), “globally aware and competent graduates”. This dimension is not explicitly mentioned in the top priorities from the Government, yet included in the White Paper on internationalisation, and frequently referred to by university and university college staff in interviews. These aspects are difficult both to measure and to attribute to single efforts or schemes. Yet when interviews explicitly solicit views on effects of the Quota Scheme, most faculty and administrative staff refer to diversity and international outlook, alongside the global social responsibility of their institution. It should, therefore, be included as an effect on institutions. However, with students spread across so many institutions and courses, the diversity effect is uncertain. Also, interviewees at smaller institutions that receive relatively larger cohorts of quota students are more vocal about the effects on diversity, while larger institutions rather emphasize the global responsibility of their institutions and the sector as a whole.

### 4.3 Compatibility of objectives

The development effects are stronger than the internationalisation effects. Effects on individual learning are clear. Effects are likely and reported positive on home universities to which students return with new and relevant skills. High return rates underpin these findings.

Effects on internationalisation are much less visible. From interviews with both administrative staff and on a management level with Norwegian higher education institutions, the Quota Scheme emerges as a welcome and well appreciated supplement to other internationalisation efforts, limited specific results or effects. The most important internationalisation effect has been the early development of courses

taught in English. A natural continuum could have been development of sandwich programmes or even joint degrees, however this has not materialised to a very large extent.

Objectives are compatible in the sense that they could mutually reinforce each other. It is however also possible to further strengthen the development effects without strengthening internationalisation. Strengthening internationalisation effects would require a stronger integration with overall internationalisation strategies, especially with regards to curriculum and courses development. Since joint degrees are experienced as difficult even among relatively similar institutions in developed economies, it is a long way to go for joint degrees with developing

**TABLE 4.5**  
Summary of internationalisation effects

Goal	Observation
<b>Strengthen international dimensions of curriculum</b>	<ul style="list-style-type: none"> <li>- Some but limited influence on development-oriented courses (difficult to isolate from broader partnership effects)</li> <li>- Early phase contributed to the establishment of courses taught in English</li> <li>- No joint or dual degree programs, despite encouragement from Ministry</li> </ul>
<b>Enhance quality of research</b>	<ul style="list-style-type: none"> <li>- Number of research projects with international partners in quota countries has increased, especially for Norwegian universities with strong partnerships in place</li> </ul>
<b>Increasing diversity and international outlook</b>	<ul style="list-style-type: none"> <li>- Considered an important effect by the Norwegian higher education institutions themselves</li> <li>- Number of international students on campus increases by virtue of the Quota Scheme, but with few students in each place</li> </ul>

countries. For many Norwegian higher education institutions, efforts to establish joint degrees or courses may need to be tested and further developed in easier contexts before expanding to developing countries with more challenges regarding accreditation and academic standards.

Nevertheless, strengthening the demand side of courses, and concentrating quotas in fewer countries and institutions, may promote both development and internationalisation.

## 5 Efficiency

*Abstract: The Quota Scheme at first glance appears resource-efficient in the sense that overhead costs are limited and most resources flow directly to beneficiaries. Yet organisational simplicity has created a rigidity that negatively affects results and incurs a number of hidden costs. A mismatch between responsibilities and influence creates bottlenecks that nobody is responsible for resolving.*

### 5.1 Administration

Several public institutions are involved in organising the Quota Scheme, typically as an integrated part of their overall operations.

#### 5.1.1 SIU's role after 2005

As discussed in chapter 2.2, a number of changes were made to the management of the Quota Scheme following the evaluation in 2005. From January 1<sup>st</sup>, 2005, responsibility for the management of the Quota scheme was transferred from the Ministry of Education and Research to SIU. Yet, responsibilities for a number of administrative tasks remain with relevant entities, notably visa and financing issues. The higher education institutions have a specific responsibility to (i) coordinate and send loan applications to the regional office of the Norwegian State Educational Loan Fund, and (ii) inform students about rules and regulations, including changes. SIU's main responsibilities with regards to the Quota Scheme are effectively limited to:

- Distribute slots across institutions based on their applications and for a three-year period. This includes reviewing whether proposed study programmes are in line with the intentions and limitations of the Quota Scheme
- Request and compile reporting. All completed degrees are to be reported to SIU

- Be an information centre for educational institutions, as well as advising the Ministry of Education and Research

One of the motivations for transferring management of the scheme to SIU was to enable synergies with other schemes and programmes that the centre is responsible for. There is little evidence of such synergies from interviews with either SIU or the higher education institutions.

Transferring responsibilities to SIU also involved responsibility for allocation of quotas. Consequently SIU established criteria for the allocation of quotas across institutions after 2005. These criteria led to more predictability for institutions. At the same time quotas are more a distribution key than an actual qualitative assessment. As noted above, the partnership requirement is not very strictly applied. There are also limited guidelines or requirements regarding which subjects can be accepted as quota subjects. SIU's administrative capacity has not been leveraged to promote the preference for joint degrees under the Quota Scheme, or to operationalize or follow up the requirement of actual partnerships as a basis for quota allocations.

The interview also revealed several issues that SIU does not have control over or little opportunity to influence. The centre has no influence on the number of quotas that are included in the scheme, the distribution of quotas between developing countries and other countries, or what countries are included.

SIU also has reporting responsibilities but the selection and use of data is unclear. The higher education institutions report annually to SIU on a number of variables. The information is forwarded to the Ministry of Education and Research and the Norwegian State Educational Loan Fund, and SIU uses

the data in their own publications. The data collected is not used for other purposes than reporting and is not aligned with general reporting required by the institutions.

Finally, in cases of disagreement or differences of interpretation, SIU has no mandate to instruct other entities, for example the Norwegian State Educational Loan Fund, or possibility to resolve bottlenecks.

### **5.1.2 Streamlined is not necessarily efficient**

While SIU has the overall responsibility for assigning quotas and overseeing implementation, applications from and disbursement to students is the responsibility of the State Education Loan Fund.

Integrating and streamlining tasks to specialised institutions reduces overhead costs to a minimum. All available resources actually benefit the student directly. On the other hand, these institutions are not specialised in international students or specifically equipped to handle this particular programme. As a result, the Norwegian higher education institutions often need to bridge between students and institutions and help the former navigate the system.

The main challenges reported by Norwegian higher education institutions relate to the Norwegian State Educational Loan Fund. When students are first admitted to a Norwegian higher education institution, they are in principle only offered a slot, and are invited to present an application for student financing. Such financing is not automatic, is often delayed, does not always meet actual needs, and may even in some cases be rejected.

First, delays cause difficult personal situations and may distract students during the first semester. Students need to apply for a visa. After getting a visa,

students must contact the tax office in person to register as a resident in Norway no more than eight days after they have moved to Norway. This requires that the student has a residential address or an alternative postal address. Subsequently, the tax administration can assign the student a national ID number. The ID number entitles the students to Norwegian health services and to a bank account, and is a prerequisite for applying for a student loan. The administration staff at the Norwegian institutions stating that students often have to wait unreasonably long before they get their ID number.

For the most part, students having come this far in the process are eligible for student financing and will receive their loan after arrival in Norway. Many students however need to borrow money from relatives or friends to cover their travel costs to Norway. These costs are part of the student loan and grants, but are spread out across the monthly payments. Other students experience delays in receiving funds. All quota students are, however, eligible for an advance payment or start-up funding. This is currently at NOK 18,000. This funding was introduced in response to the challenges described above. Several of the Norwegian education institutions, however, report that the payment is often not sufficient for covering costs of deposits, rent, books, and other start-up costs for up to three months. Some institutions reports that they therefore are trying to help students financial with money from the institutions' own money or even through private loans from employees at the institution.

The information about the Quota Scheme at the Norwegian State Educational Loan Fund's homepage is in English. Still, many institutions report that an important challenge in the application for student financing is that some of the forms and some of the

information about the Quota Scheme are not available in English. Forms are also not tailored for quota students and hence difficult to interpret and fill.

Second and more seriously, according to the administrative staff at the institutions we have interviewed, it has occurred in some cases that students experience that their application for financing is rejected because the Norwegian State Educational Loan Fund has found that they do not meet the requirements to get loan. Both the Norwegian Educational State Fund and the institutions must in most cases use their judgement to assess the authenticity of the documentation submitted.

A common challenge in cases where students are being rejected relates to the requirement that they must have spent at least a year prior to entering Norway in their actual home country. This is interpreted strictly by counting weeks and any residence less than a year may lead to rejection. A second challenge is for doctoral students that are invited to apply for PhD programmes but need to prepare a thesis application. Typically, their host institutions will urge these students to travel home in order not to run into problems with future funding, although from an academic perspective it may make more sense to stay in Norway.

After completed studies, the Norwegian State Educational Loan Fund expends significant resources occasionally involving the Norwegian higher education institutions, to find out if the students have finished their studies or not. This is done by extracting a student list from the Norwegian State Educational Loan Fund's system. The list must be processed manually. There are also dedicated resources to track students' whereabouts with the purposes of reaching the students with a reminder that they can apply for remission of loans, and to eventually send the students a payment plan. The students who

have moved home and who wish to apply for cancellation of loan must document that they have lived in their home country for one. If the students do not respond to the inquiries, the Norwegian State Educational Loan Fund will follow up with a payment notice. The Norwegian Educational Loan Fund has, however, not the resources or methods to determine where the students go after leaving Norway. A relatively common problem is that the students forgets to report their new address to the Norwegian tax authorities after completing their quota studies, resulting in students receiving repayment requests despite fulfilling requirements.

The Norwegian State Educational Loan Fund assumes that a quota student has returned home if he or she is registered with a final departure, the residence permit has expired, the student have not applied for funding the last year, or the student have stated an address in his or her home country.

While higher education institutions do their best to explain regulations and facilitate these processes, they are occasionally surprised by changes in practice, or rigidity in the student loan system. The actual regulations for the next academic year are not available at the time the student receives an admission letter from their host institutions, and may change. In addition, how regulations are implemented in practice may change even without the host institutions being aware of it.

The Norwegian State Educational Loan Fund follows principles of equal treatment and fulfils its mandate by applying governing regulations. Instead of making practice predictable and transparent, however, this approach leads to rigidity to the detriment of quota students, host institutions, and ultimately leads to inefficient implementation.

Not all quota students are affected by such hurdles. In the survey, 22 percent of students replied that they to a great or some extent found it difficult to cope with the bureaucratic issues related to the Quota Scheme. Nevertheless, for the actors involved, this rigidity result in significant resources and frustration. More importantly, the examples display shortcomings in implementation arrangements.

The Norwegian higher education institutions use a great deal of resources to find temporary solutions for students waiting for their loans, facilitating applications or responses that get lost, delayed and are sent to wrong addresses. Almost all the higher education institutions also report that they use relatively much time helping quota students to understand the content of and to fill out the forms that are requested, such as forms from the Norwegian State Educational Loan Fund. Arguably, these institutions are responsible for their overall internationalisation efforts. Many dedicated organisation and staff facilitating student mobility. Yet these offices have limited influence over immigration and tax authorities and student finance and often find it frustrating to meet quota students and their delays without the means to help. Most would be happy to spend time assisting and facilitating if they had more influence on the process and outcome.

The survey confirms that students get significant administrative support from the universities and university colleges. Respectively 61 and 34 percent of the respondents says that they found the service at the Norwegian educational institution to be very supportive or supportive. The students report that they get most support on bureaucratic and financial issues, followed by academic issues and personal issues.

Virtually all the educational institutions interviewed report that they allocate additional funds often referred to as “emergency funds”. This can take place both centrally and at lower organisational levels. The funds are often money allocated from the institutions’ sector funding. In cases where students are unable to pay for themselves, the funds provides for such as incidental travel costs, medical care, subsistence and house rentals. A number of institutions also provide funding for PhD students for equipment and conference participation not covered under the quota scheme. The availability of such support depends on the economic flexibility of the particular institute and does not ensure equal treatment across quota students.

### 5.1.3 Limited rationale for loans-to-grants

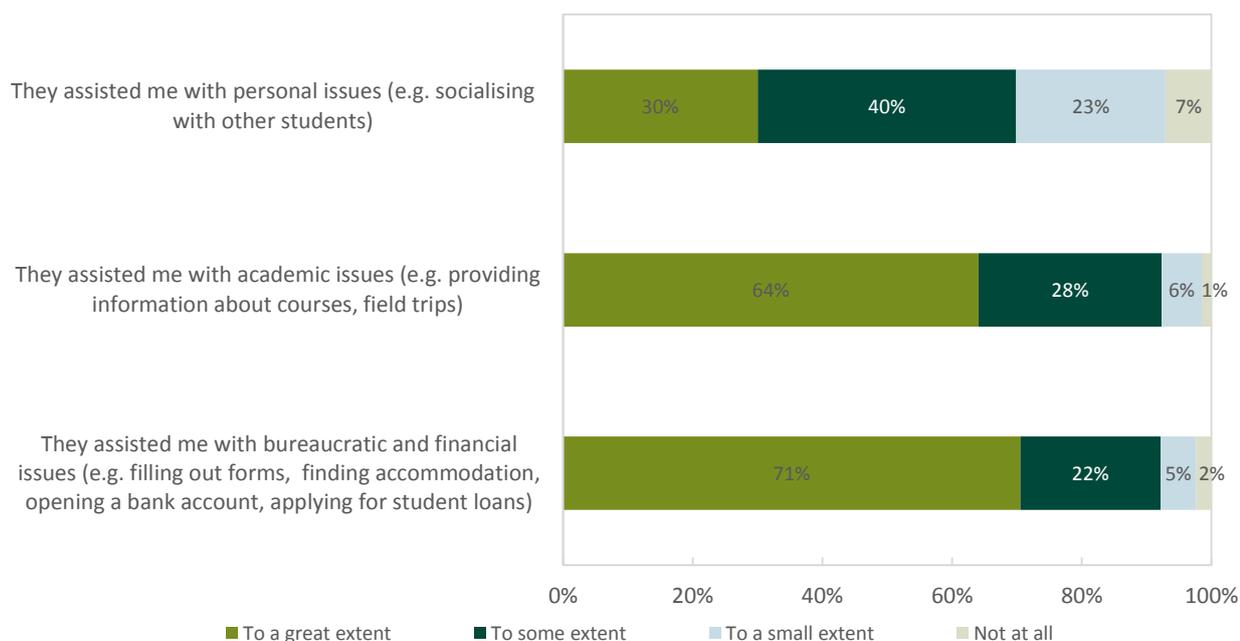
The main rationale for channelling funds through the State Education Loan Fund is that students first receive a loan, subsequently converted into a grant when students return to settle permanently in their home country. The requirement intends to mitigate the risk of brain drain and encourage students to return to their home country. In order to extend a loan to quota students, the Norwegian State Educational Loan Fund necessarily needs to be involved, since no other entities are mandated or qualified to provide loans as a banking facility.

An important question for the evaluation is however whether the return requirement and conversion policy in fact contributes to return. In addition, this requirement needs to be analysed from a cost-benefit perspective. The cost are mainly administrative. As

noted above (5.1.2), the Norwegian State Educational Loan Fund spends significant resources trying to follow up the regulations and requirements concerning the quota students who have completed their quota studies. In addition, for the individual students, there is a cost in terms of future flexibility. Ten years is a long time to limit mobility for former students to seek even temporary jobs in Norway or a third country.

The benefits are the possibilities of students returning home. It is not clear from the evaluation that the arrangement increases the rate of return. First, those who stay in Norway primarily work in petroleum, where there is a shortage of skilled labour, relatively high wages, and a number of English-speaking work environments. To these students,

**FIGURE 5.1**  
Issues where students were administratively supported by Norwegian higher education institutions



Source: DAMVAD  
Note: N=1,763

the student loan payments are small relative to their Norwegian salary.

Second, interviews with academic institutions in home countries indicate that fieldwork in the home country and linkages with the home institutions are strong pull factors to get students back home after their studies.

The return rates for quota students are high, and above 70 percent for students from developing countries. In comparison, among all foreign students in Norway included in DAMVAD's Integrating Global Talent study from 2013, 36 percent of a total of 8,309 international bachelor's and master's students who have finished their education in Norway in the period 1991-2011 have left Norway (DAMVAD 2013). Of a total of 2,003 international PhD students who finished their education in Norway in the same period, about half (1,053) have left Norway. The largest group of international graduates that have left Norway come from countries in Africa, South America and Oceania. In fact, a larger share from these countries leaves Norway than their fellow students from Asia, the Nordic countries and the rest of Europe (both EEA countries and other European countries). Part of the explanation for these differences could be that EU citizens are allowed to live and work in Norway under the regulations of the internal European market. The likelihood of quota students getting a job in Norway is more uncertain than for these students.

From the observations of the evaluation, it is not clear that the benefits in terms of likelihood of return in fact is big enough to justify the costs. Possibly, other measures could strengthen return rates, inter alia stronger incentives for fieldwork at home or stronger alignment with home country topics in selection of courses offered to students.

If the return requirement and linkage to loan conversion is no longer relevant, a broader range of options for disbursement and management of resources becomes available. This is further discussed under recommendations.

## **5.2 Cost efficiency**

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In order to evaluate the cost efficiency of the Quota Scheme, it is useful to compile an estimate of overall annual costs.

In addition to the financing through grants to students, the Quota Scheme has a larger cost to society in terms of study slots offered to international students at no cost. There are two ways of estimating the costs of the scheme: the budget cost is the cost of loans converted to grants, plus the cost of grants awarded to 1100 quota students per year. This is the budget allocation that is actively decided and could change in an annual budget allocation process. The second and larger cost estimate includes the cost of study slots at Norwegian higher education institutions. The second estimation should also account for administrative costs in managing the scheme, across various public institutions.

### **5.2.1 Student financing**

The Quota Scheme has three main cost components: student financing, costs of student slots, and administrative costs.

In addition, it should be taken into account that the schemes also involves economic losses. It is customary to estimate the economic loss of tax funding to 20 percent of the budget costs.<sup>32</sup>

The cost of the Quota Scheme related to student financing consists mainly of the following two components:

- Cancellation of debt, requires that students return home.
- Grants, paid regardless of return or not

All students can apply the Norwegian State Educational Loan Fund for loans and educational grants, referred to as the “basic support”.

The basic support amounts to NOK 47,200 per academic semester. Of this, NOK 18,880 can be converted into grants each semester.

The quota students can also apply for support to cover their first trip to Norway, an annual travel home in relation to fieldwork, and their final travel home. The students are eligible for an advance payment or start-up funding at the start of the semester or when arriving at the Norwegian educational institution. Quota students that have children during the studies under the Quota Scheme are eligible for a parent grant. In addition, the quota students may be eligible for additional grants for providing for children if the student has children living with her or him in Norway.

The Norwegian State Educational Loan Fund had approximately NOK 63,711,000 in expenses related to quota students in 2011. Of these, NOK 23,893,000 covered the educational grants, NOK

8,290,000 covered start-up grants, while NOK 21,847,000 went to cancellation of loans.

### 5.2.2 Cost of a study slot

The funding of Norwegian universities and university colleges is made up of three different components, referred to as the basic component, the teaching component and the research component.

Different types of education are valued differently regarding the cost per student, and the studies are divided in six different categories, A to F. The rates reflect teaching and equipment costs. The expenditures per student are divided into funding 60 percent directly to the educational institutions through the sector funding, while 40 percent of the expenditures are paid per student finishing 60 credits (corresponds to 60 ECTS).

Most of the quota students attend educations that belongs to category D, such as social sciences and law and business and administration. There are also a large proportion of the quota students attending subjects categorised in category C, including science, vocational training and technical subjects, and category A, including health, medicine, dentistry and sport.

The Ministry for Education and Research estimated that a quota student on average cost NOK 145,755 in 2012. According to their figures, 1,047 quota students were enrolled at a Norwegian institution in 2012. The total cost for all quota students in 2012 is thus NOK 152,606,000. The calculation is based on statistics from SIU.

<sup>32</sup> “Guide to public finance analysis”, Ministry of Finance (2005).

Using DAMVAD's data we find that the average cost per student was NOK 165,987 in 2012.<sup>33</sup> The figures are based on data from Statistics Norway and the Norwegian State Educational Loan Fund. According to this figure, the total cost amounted to NOK 166,651,400 in 2012. Our categorisation of fields of education is shown in table 5.1.

**TABLE 5.1**  
Average cost per quota student across fields of education. 2012 (DAMVAD's calculations)

Field of education	Number of students	Cost (NOK)	Category (A-F)
Natural sciences, vocational and technical subjects	313	168,000	C
Humanities and arts	169	118,000	D
Health, welfare and sport	158	328,000	A
Social sciences and law	143	118,000	D
Business and administration	110	118,000	D
Education	64	102,000	E
Transport and communications, safety etc.	25	118,000	D
Primary industries	14	118,000	D
Missing/unspecified field of study	8	164,675	-
<b>Total</b>	<b>1,004</b>	<b>165,987</b>	

Source: DAMVAD

Note: Cost per student with missing or unspecified field of study is based on the average cost per student for the ones with known field of education.

In the calculation of the total cost of the Quota Scheme (table 5.2), we have chosen to use the lowest cost per students, i.e. the Ministry's estimate.

<sup>33</sup> Based on registry data from Statistics Norway and the Norwegian State Educational Loan Fund we are able to identify 1,004 active quota students in 2012.

Differences in categorising the quota students may be an explanation of why our cost exceeds the Ministry's estimate. In addition, we have not taken into account that five percent of the quota students in our data only received loans for one semester (either fall or spring).

**TABLE 5.2**  
Estimated total cost of the Quota Scheme 2012/13

Cost	Calculation	Total per academic year (NOK)
<b>Loans and grants</b>	The Norwegian State Educational Loan Fund	63,711,000
<b>Cost of study slot**</b>	Based on average cost NOK 145,755 per quota student	152,606,000
<b>Administrative cost at host institution***</b>	Estimated 0.5 FTEs á 43 educational institutions = 21.5 FTEs	21,500,000
<b>Administrative cost at SIU</b>	0.5 FTEs	350,000
<b>Administrative cost at NSELF</b>	2.2 FTEs	1,540,000
<b>Total cost</b>		<b>239,707,000</b>

Source: DAMVAD

\*2011-figures

\*\*Based on the Ministry of Education and Research's calculations.

\*\*\*0.5 FTEs is estimated based on information from the 11 institutions interviewed in conjunction with this evaluation. One FTE is estimated to cost NOK 700,000 cf. section 5.2.3.

### 5.2.3 Administrative costs

The entities involved in implementing the Quota Scheme all incur a certain level of administrative costs that are not reflected in annual budgets and the total allocation to the Quota Scheme.

In addition, the Norwegian State Educational Loan Fund has administrative expenditures related to:

- Internal administration of the Quota Scheme.
- Facilitation of the Quota Scheme and giving information to the educational institutions about the Scheme.
- Proceeding of applications from quota students (granting and repayment). This is the most resource-intensive factor.

From the information we have collected, the Norwegian State Educational Loan Fund used approximately 2.2 full-time equivalents (FTEs) to manage the Quota Scheme for the academic year 2013/14. This is an increase of 0.3 compared to 2012/13. The increase can mainly be explained by internal administration and proceeding of applications due to a new application system. It is expected that some of the resource usage will normalise over time. According to information from the Ministry of Education and Research, the annual administrative costs are estimated to NOK 1.5 million. Multiplied by 2.2 full-time equivalents this equates to just under NOK 700,000 per full-time equivalent. SIU reported that they used approximately 0.5 full-time equivalents to administrate the Quota Scheme in 2012.

The resources are almost equally divided between four main tasks:

- General information activities, included to inform and have contact with the educational institutions, including organising and conducting regular information meetings and dealing with inquiries from the educational institutions, for example regarding the approval of new academic programmes.

- Process applications from the institutions on the allocation of quotas and allocate quotas at the institutions
- Acquiring and ensuring the quality of information from the educational institutions, review the collected information and data, and make reports to the Ministry of Education and Research
- Participation in meetings with the Norwegian State Educational Loan Fund, the Norwegian Directorate of Immigration, etc.

The administrative costs of the Norwegian educational institutions related to the quota scheme vary.

The 11 educational institutions interviewed on average report that the central level (student offices/international offices) spend 0.7 full-time equivalents on administering the Quota Scheme.

The University of Oslo, which has the largest number of quota students report that they use about 1.5 full-time equivalents to administrate the Quota Scheme. The 1.5 full-time equivalents includes applying for quotas and reporting to SIU, processing quota applications, reception of students, to help students find housing and in sickness and at childbirth, and general supervision during the study. In comparison, one of the smallest educational institutions reports that they use approximately 0.05 full-time equivalents to administrate the Quota Scheme. Institutions also report that the faculties and institutes in varying degree have costs related to the quota students and the Quota Scheme.

The administrative costs at the partner institutions in the quota countries have not been systematically assessed yet is not expected to be significant. Their only role is selecting students for allocated quotas. Faculties at the partner institutions typically inform their students about the Quota Scheme, and often

assist in the application procedures. Administrative costs at tax and immigration authorities have not been estimated but are described above.

Based on the conditions that are explained in this chapter, the total cost of the Quota Scheme is estimated to be NOK 239,707,000 in 2012. In addition, the non-accrued tax funding is estimated to be approximately NOK 48 million.<sup>34</sup>

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<sup>34</sup> Given a tax cost of 20 percent of the budget costs

### 5.3 Synergies

In principle, the Quota Scheme can work well alongside other internationalisation programmes, including those funded by the Ministry of Foreign Affairs and targeting developing countries. Two main observations are (i) the Quota Scheme works well in supplement with other programmes, but has less tangible effects on its own, and (ii) the Quota Scheme remains the only programme available to all institutions. There is very little overlap with other programmes, since these are all quite different from the Quota Scheme.

Asked about synergies with other internationalisation programmes, however, Norwegian higher education institutions have few explicit strategies to align various arrangements. Some institutions state that they do use the Quota Scheme to supplement existing partnerships, most notably the University of Life Sciences, the University of Bergen, and the University of Oslo. The Quota Scheme is typically seen as a nice add-on to partnerships on an institutional level, but does not in itself build new partnerships. For most Norwegian institutions, there are no synergies on a strategic level.

When asked about the how Quota Scheme can be used in combination with other programmes and schemes (to enhance the Quota Scheme's internationalisation objective), it was difficult to get a clear answer. Synergies appear more haphazard than a result of strategic integration. However, it may seem like it is easier to see the Quota Scheme in conjunction with other programmes at PhD level, as these programmes to a larger extent are related to other projects. For instance certain institutions reported that the scheme work in combination with NUFU

and NOMA by putting quota students in projects under the programmes. One of the institutions mentioned that they used the High North Programme to recruit students from Russia and China. This was, however, not in collaboration to the Quota Scheme. Another institution said that they used the Norwegian Cooperation Programme in Higher Education with Eurasia to maintain their cooperation to Belarus. Belarus was earlier included in the Quota Scheme. A third institution said that they used a range of other programmes and schemes, and the most obvious programme that was mentioned as complementary to the Quota Scheme was the Norwegian Cooperation Programme in Higher Education with Eurasia, but none of them was used strategically towards the Quota Scheme.

As the evaluation has noted, effects on research quality are likely more a result of research partnerships than the Quota Scheme. Effects on integrating new perspectives are stronger for institutions and fields where other collaboration programmes with universities in developing countries are also operational. On its own and without parallel programmes, the Quota Scheme has very limited effects on internationalisation. Specifically, Norwegian institutions seem to be able to get more out of a quota student from developing countries if also participating in NOMA<sup>35</sup> and NUFU<sup>36</sup>. Going forward, the new programme NORHED is much more selective than NOMA and NUFU. It will cover fewer institutions than previous programmes. On this basis, some of the interviews with the Norwegian institutions indicate that the Quota Scheme will be more important to them in the future. On the other hand, fewer institutions will have the opportunity to combine research partnerships with the Quota Scheme. As NORHED narrows down research collaboration to

<sup>35</sup> Norad's Programme for Master Studies

<sup>36</sup> The Norwegian Programme for Development, Research and Education

fewer Norwegian institutions, a more concentrated Quota Scheme might be beneficial both to complement NORHED and to increase the number of quotas coupled with relevant internationalisation efforts at institutions not part of NORHED.

The EU programme Erasmus Mundus also has objectives similar to the Quota Scheme. In addition to the relevance of learning from some of its approaches, Erasmus Mundus could represent some synergies with the Quota Scheme going forward. Erasmus Mundus aims to both increase internationalisation of European universities and provide opportunities for students from developing countries. More specifically, it aims to “enhance the quality of European higher education and to promote dialogue and understanding between people and cultures through cooperation with Third-Countries”. In addition, it contributes to the development of human resources and the international cooperation capacity of Higher education institutions in Third Countries by increasing mobility between the European Union and these countries”. Selection of institutions and students – offers scholarships to students and higher scholarships for students from third countries (non-EU, non-EEC).

In the period 2014-2020, EU's programmes within education, youth and sports be integrated in the new programme, Erasmus +. A final decision on whether Norway should join Erasmus + is currently under consideration. In anticipation of formal decisions, possible linkages with the Quota Scheme appears not to have been discussed by the higher education institutions.

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### BOX 5.1

#### The Norwegian Programme for Capacity Development in Higher Education (NORHED)

In 2013, Norway's new Programme for Capacity Development in Higher Education and Research, NORHED, became operational. With an annual budget of about NOK 150 million, this is to provide funding to research-based collaborative programmes between universities in Norway and developing countries. Norad notes that support to higher education and research is a priority area of Norway's development cooperation policy: "Sound, strategic investments in higher education and research in low and middle income countries (LMICs) pay off in the form of strong academic institutions and their societal engagement. Such investments have many benefits, not least that they contribute to development of their countries' intellectual resources, competent workforces, visionary leaders, gender equality and human rights. In the long run it also contributes to evidence-based policies and decisions that enhance sustainable economic, social and environmental development in low and middle income countries."

In NORHED, each programme must be based on institutional commitment and involvement by all parties and must have a thematic and/or geographic focus. NORHED funds can support bachelor's, master's and PhD degrees, and will also fund research activities.

When it comes to tracking performance, NORHED requires that universities, at the level of Outputs, document the number of graduates at PhD, master's and bachelor's levels and the number of programmes established and modified. At the level of Outcomes, they are to report on the extent to which the graduates contribute to increased capacity at the universities or in different sectors of society.

Source: Norad ([www.norad.no/en/support/norhed/NORHED](http://www.norad.no/en/support/norhed/NORHED))

Note: NORHED replaces the two higher education pro-grams NUFU (Norwegian Programme for Development, Research and Education) and NOMA (Norad's Programme for Master Studies). NUFU funded independent academic cooperation based on initiatives from researchers and institutions in the South and relevant institutional partners in Norway while NOMA is a programme for providing financial support to develop and run master's degree programmes in the South through collaboration between local and Norwegian higher education institutions.

## 6 Conclusions and recommendations

The main conclusions of the evaluation are that the Quota Scheme has relatively strong development effects, but that its effect on internationalisation of Norwegian higher education institutions is limited.

Certain design features limits effectiveness on both objectives, and the evaluation also points at a number of inefficiencies in the way the quota scheme is managed. This chapter recapitulates the main observations from the previous chapters, and makes recommendations based on these observations. Recommendations present a scale of options where smaller amendments could strengthen development effects and more significant changes could also leverage stronger internationalisation effects.

International schemes similar to the Quota Scheme offer useful comparison and inspire some of the recommendations. The United Kingdom has practiced a scholarship scheme akin to the Quota Scheme since 1959, and the EU launched similar opportunities to students from outside the EU in 2006. Both these can provide insights and lessons to the further development of the Quota Scheme.

### 6.1 Summary of findings on design and effects

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Overall, the Quota Scheme is a popular arrangement, among students as well as institutions. This popularity must be seen in relation to the limited costs for both institutions and students, compared to a modest to high impact, respectively. But being well-liked is in itself not sufficient to be considered a success, or to justify further investment of scarce public resources.

**Relevant and partly effective for development.** While education abroad matters to development, it also matters a great deal *who* studies and *what* they

study. The Quota Scheme has no built-in features to ensure that courses offered to quota students are courses that they actually need.

Assessing and aligning academic opportunities with national competence needs and labour markets is unrealistic for a student mobility scheme of limited magnitude and large number of countries with relatively few students from each country. Yet there are other ways of ensuring relevance, inter alia (i) responding to student demand; (ii) aligning with Norad priority areas in selected countries where at least by definition Norway has expertise to offer, or (iii) asking partners institutions about specific shortages or needs among postgraduate staff.

The Quota Scheme does not look to either of these factors when identifying and distributing slots. Instead, institutes at Norwegian institutions apply for quotas through their institution, which collects requests and sends an application to SIU. The centre distributes quotas across institutions.

SIU requires that courses are approved by national authorities and that institutions can demonstrate some sort of partnership with an institution in an approved quota country. It is in principle a requirement to institutions that they must be able to prove the existence of a partnership agreement, but in practice, it may be sufficient to refer to an informal agreement.

The list of approved courses is comprehensive. So is the list of quota countries. Effectively, which courses are offered to which students depends mostly on the Norwegian institutes' needs. In the academic year 2012-2013 quota students were spread across 75 countries of origin. The students are often spread thinly at several different institutions.

Partner institutions raise some concerns that the overall process lacks predictability and does not necessarily result in opportunities aligned with their needs. Limiting the list of eligible quota countries and strengthening the partnership requirements could help strengthen responsiveness to actual needs.

Another concern with selection of students is lack of clarity on selection procedures, and consequently on transparency in selection. Processes vary greatly, from postings at home university, via special invitation by certain faculty member, to word of mouth.

Higher education in many developing countries is still very unequally distributed. While the gender distribution is relatively equal across the Quota Scheme as a whole, the share of female students from developing countries is significantly lower than for other countries. Tertiary education typically reproduces inequalities and favours the privileged, often men. So far, the Quota Scheme has had limited effect on redressing these inequalities.

The Quota Scheme has demonstrated development effects, documented in terms of strong learning outcomes. Since the establishment of the Quota Scheme in 1994, 4,545 students have completed at least one degree under the scheme. Of these, 78.5 percent (3,567 students) have completed a master's degree, 11.2 percent (507 students) have completed a PhD while 10.4 (471 students) have completed a bachelor's degree.

The survey among former quota students indicates that students have been able to get better jobs and do better in their jobs as a result of the degree from Norway.

A high share of students return to their home countries upon completed studies, and return rates are over 70 percent for students from developing countries. Developing countries also have the highest share of PhD students. Students from Eastern Europe, Western Balkans, and Central Asia countries have lower return rates. Russian students have the lowest return rates and typically study on a lower level than their fellow students from developing countries and China.

**Relevant but narrow approach and limited effects on internationalisation.** Effects on internationalisation are more limited and the marginal value added by the Quota Scheme has fallen over time. Interviews with Norwegian higher education institutions reveal limited demonstrable effects on internationalisation of higher education institutions in Norway.

Drawing from Norwegian policy and international literature, effects are measured along three criteria:

- Integrating international perspectives at every level of education
- Increased quality of research
- Increasing diversity and international outlook

For development-oriented studies, the presence of quota students has reported effects on integrating new and useful perspectives to coursework. These studies are often also subject to stronger partnerships funded through other programmes, so it is difficult to isolate the effect of the Quota Scheme, other than as a useful supplement. For other courses, faculty and management both express effects mostly in terms of the institution's contribution to global redistribution and development. There are, however, a few institutions who say that the Quota Scheme is

important for certain programmes offered and for research that has been implemented,. Overall, however most institutions respond that their programme provision and research activity do not depend on the Quota Scheme.

In earlier years, the Quota Scheme spurred the development and establishment of courses taught in English, which in turn contributed to attracting international students beyond the Quota Scheme. Yet since this, the Quota Scheme has not resulted in new degrees or tailored courses in the same way. As a result of increased international competition between educational institutions, the institutions have become more internationalised over time. Presently, other factors contribute more to new degrees and the scale of courses taught in English than the Quota Scheme.

Despite encouragement from the Ministry of Education and Research, joint degrees and sandwich programmes have not materialised to a very large extent. The priorities concerning joint degrees and sandwich programmes are admittedly not an absolute requirement, and it would not be fair to assess the Quota Scheme entirely against its ability generate such degrees. On the other hand, tailored or joint degrees are a policy priority and a much-cited indicator of internationalisation in higher education. Thus, establishment of different types of degrees is a relevant indicator of the ability of the Quota Scheme to contribute to scholarly content in addition to student numbers.

It should also be added, however, that establishing joint degrees and sandwich programmes is a demanding process, and that the Quota Scheme does not cover up for this either financially or structurally.

In comparison, the Erasmus Mundus programme includes setting up joint degrees to which students in

turn can apply. Erasmus Mundus is an interesting comparison because its objectives are primarily to address needs among European institutions for higher education to ensure their global attractiveness.

The Erasmus Mundus programme has a broad perspective on internationalisation, including as an “important vehicle for the promotion or intercultural dialogue between the European Union and the rest of the world” (Programme Guide). The development of joint programmes is supported over education resources, while scholarships are funded with development funds. Contrary to Erasmus Mundus, the development of joint programmes or sandwich arrangements under the Quota Scheme is not supported with external funds but is the responsibility of the higher education institutions. In Norway, joint degrees are also not required only encouraged.

Under Erasmus Mundus, the joint degrees are typically with other European institutions, not necessarily universities in developing countries. Even with universities within Europe, Norwegian higher education institutions have a limited track record with joint degrees, and SIU’s facility to support joint degrees is reported underused.

There are many challenges related to accreditation and common quality standards. These can be expected to be even higher with developing countries. Ambitions in this area should take into consideration these challenges and could consider more actively supporting joint degrees with other European institutions to start, possibly with scholarship opportunities for third country students similar to or fully aligned with the Erasmus Mundus programme. What seems clear, however, is that joint degrees are not going to happen under the Quota Scheme unless requirements are clarified and support is more targeted. Short of new joint degrees, fewer

and more tailored courses developed in dialogue with partner institutions would underpin both relevance of studies and integrate international perspectives at the Norwegian higher education institutions.

Research partnerships on international topics and with quota countries has increased in the evaluation period. Effects are however higher at Norwegian institutions that also nurture broader partnerships, and interviews reveal limited effects of the Quota Scheme on the quantity and quality of research. The most important effect noted by many of those interviewed is the significance of the Quota Scheme on diversity and as part of the institutions' global responsibility.

The two objectives of the Quota Scheme are not in principle conflicting, but in the current arrangement also not mutually reinforcing. Measures to strengthen one could strengthen the other, but more changes would be required to strengthen internationalisation effects than to strengthen development effects.

In its current design, the supply driven nature of courses offered supports internationalisation effects but risks reducing development effects since demand and relevance to development is not systematically considered. Unless the Quota Scheme manages to contribute to the development of more tailored degrees, such as sandwich programmes and joint degrees specifically responding to and integrating needs and realities in home countries, internationalisation effects are likely to remain limited.

Strengthening the internationalisation effects would likely require allocating some resources – from institutions themselves or from external funding, to the development of joint degrees or tailored courses as part of sandwich degrees. In this context, it would

also be advisable to look at the regulations for how long a student can be covered by the Quota Scheme and the rules for travel between Norway and the students' home country during the period the student is benefiting from the scheme.

The Quota Scheme targets both developing countries and a second group of West Balkans, Central Asia, and Eastern Europe. The list also includes the BRICS countries under the category of development countries, although few of these are in the lowest segment of ODA countries. The list of eligible countries has evolved over time reflecting both foreign policy priorities and economic development levels.

The Quota Scheme could benefit from limiting eligibility to a shorter list of countries, enabling stronger partnerships with more students from each country and also facilitating the scheme's responsiveness to needs in the eligible countries.

When prioritising, both academic objectives and development needs should be considered. Today, development effects on developing countries are higher than for other countries in the sense that a larger share of students from developing countries return home after completed studies. Lack of capacity to meet increasing demand for tertiary education is however also justified for the more developed countries including the BRICS. In the view of enabling joint degrees and strengthening internationalisation, a few emerging economies could also be worth keeping on the list. Countries where other research and development partnerships exist would have the advantage that the Quota Scheme could underpin broader partnerships.

## 6.2 Summary of findings on administration

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The Quota Scheme appears, at first glance, resource-efficient in the sense that overhead costs are limited and most resources flow directly to beneficiaries. Administrative tasks are streamlined within existing public institutions. Yet this organisational simplicity has created a rigidity that negatively affects results and incurs a number of hidden costs.

First, there is a mismatch between responsibility and influence over key decisions and processes. SIU has the overall administrative responsibility. The centre is responsible for overseeing the Quota Scheme, yet most decisions are made in other institutions. When it comes to the Quota Scheme, SIU's influence is in practice mainly limited to consider applications from Norwegian institutions on the allocation of quotas and distributing slots across the institutions, collecting data from the institutions, mainly on the behalf of the Ministry of Education and Research, and to inform and advise the institutions and the ministry.

The requirement that quota students should be part of an institutional partnership and the encouragement of joint degrees or sandwich programmes are also not very strictly applied. The latter is explicitly encouraged but not required by the Ministry and not actively pursued by SIU. The centre's administrative role further appears to have had limited impact on establishing linkages and synergies between various programmes that SIU administers and the Quota Scheme. To enable this, SIU would need a clearer mandate with influence over resource allocation and stronger requirements for strategic partnerships and joint or dual degrees.

Second, streamlining leads to rigidities that sometimes fail to address the specific needs of quota students and institutions. Public entities responsible for

implementing the Quota Scheme have much broader mandates and are not tailored for the needs of the Quota Scheme. The evaluation especially questions whether the Norwegian State Educational Loan Fund is well equipped to deal with quota students. Examples include students experiencing difficulties in getting loans paid within a reasonable time after arriving Norway, insufficient start-up funding, and lack of flexibility to meet the needs of PhD students.

Third, the lack of available resources for strengthening institutional partnerships reduces effects on both development and internationalisation.

There is also reason to question the loan-to-grant principle, which is complex to monitor and administer and has some unintended consequences, without necessarily contributing as intended. Encouraging and promoting return is important to mitigate the risk of brain drain. Yet other factors also influence return, and the impact of the loan is uncertain. For most former students, working in Norway is not an option. For those that have such opportunities, a student loan is a minor cost. Fieldwork at home, relevance of studies to home institutions, and contractual commitments to return are other options. Moreover, removing the loan from the equation opens a new range of administrative option that may increase overall administrative efficiency.

## 6.3 Recommendations

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The evaluation provides recommendations to strengthen both development and internationalisation effects. The recommendations provide a scale of proposed changes, where the lower scale would enhance development effects while more radical changes could also increase effects on internation-

alisation. Specific recommendations on new administrative arrangements underpin these proposed changes.

The lowest hanging fruit would be an amendment that concentrates quotas in fewer countries and gives SIU an extended mandate. This would make the Quota Scheme more similar to the British model (the Commonwealth Scholarship).

A more radical change would be to shift the focus from student uptake to course and degree development, more similar to the Erasmus Mundus Programme. The scale of possible changes is illustrated in figure 6.1.

Neither option would fully copy the international programmes. Both options recommend removing the role of the Norwegian State Educational Loan Fund and set up a scholarship scheme managed by a mandated entity, disbursing funds to selected higher education institutions. As long as funds are not disbursed as loans but as scholarships, higher education institutions could set up management of such funds, subject to approval from an overall mandated body, for example SIU. Some institutions already have a system to manage student scholarships or other forms of funds.

### 6.3.1 Country and student selection

In order to strengthen development effects, the Quota Scheme would benefit from concentrating on fewer countries. This would imply a need to prioritize stronger. More students from each country and institution could also enable actual partnership and a better understanding of needs, as identified both by the home universities, and as reflected in development priorities and knowledge of main knowledge gaps or key economic sectors in a given country.

With fewer countries, Norad could contribute inputs on development priorities as identified in their overall country dialogue. Eligible countries could include both developing and emerging economies, but authorities may wish to concentrate efforts in countries with which Norway already has strong and established partnership either through development funding (East Africa, selected East Asia countries) or through trade (China, Brazil, Russia).

The evaluation is not proposing any change to the number of quotas per year, which is considered a budgetary question. The essential issue is that of the quotas allocated, concentration in fewer countries and institutions is recommended.

The selection of students would benefit from more transparent and formalised procedures for student selection. Posting of opportunities could either be centralized to the Norwegian managing institution or delegated to partner institutions in eligible countries. Either way, information about opportunities and conditions should be posted in universal channels such as national newspapers and bulletins. The Quota Scheme should also consider incorporating targeted efforts to recruit female students from developing countries, by active search, encouraging female applicants, or introducing female quotas.

Finally, the student financing should be more tailored to the needs of PhD students, including funding of equipment and conference participation, extended until completed and approved degree.

### 6.3.2 Courses and degrees

Changes to the application and selection process for what programmes are offered to quota students could enhance both development effects and potentially also internationalisation. Both joint degrees and sandwich programmes would require more ex-

tensive dialogue with partner institutions before applying for quota slots. Such dialogue could bring international perspectives into curriculum development, and also strengthen relevance of courses offered to national and academic needs in the prospective students' home country.

As a minimum, Norwegian higher education institutions should be able to demonstrate consideration of a demand side to the courses offered to quota students. This would entail reviving the existing partnership requirement and operationalizing it in the selection process. Any Norwegian higher education institution applying for quotas would need to demonstrate not only a generic partnership but an agreement on selection of courses to be offered to quota students and the rationale behind them. A plan for fieldwork at home should be included in the plan where relevant. The evaluation indicates that this fieldwork element both strengthens relevance of knowledge acquired and increases the likelihood of students returning after completed studies.

A more demanding approach would be to require not only a partnership but also joint degrees, sandwich degrees, or degrees developed in dialogue with partner institutions. A combination is more realistic than a pure joint degrees requirement, given the limited track record with the latter to date. In this model, funding would likely also be required towards the development of such degrees towards national accreditation, and allocation procedures would need to be longer term. In this model, public funding to promote joint degrees and sandwich programmes could be integrated or linked to the Quota Scheme more systematically.

Based on the identification and plan for tailored courses e.g. as part of sandwich degrees and joint degrees, funds could also be made available for

Norwegian institutions to apply for funding to establish and develop these degrees. As before, all courses should be open to Norwegian and other international students.

### **6.3.3 Administrative arrangements**

The evaluation recommends centralizing management, strengthening the role of SIU, and changing the disbursement model for the Quota Scheme. The main reason for this is to give the centre a more strategic role.

It is recommended to keep the return requirement, but remove the linkage to loan-to-grant conversion. In the UK model, there is a contractual arrangement that binds the benefiting student to return home upon completed studies. While such contracts are not linked to financial sanctions, the British experience indicates that they do carry a certain weight. Also, efforts to ensure close dialogue with the home university, including fieldwork at home, could further strengthen interest and incentives to return home.

Removing the loan financing from the equation also opens up for more options regarding financing. Inspired by the Erasmus Mundus programme, the evaluation recommends to centralize grant management with one institution, for example SIU. This would mean that the centre disposes (i) funds to promote joint degrees, sandwich programmes or other tailored programmes and (ii) funds for scholarships to students. In the case of Erasmus Mundus, the latter is disbursed directly by the higher education institution. Norwegian universities cannot pay salaries to students but do administer a number of earmarked scholarship arrangements. Similar arrangements could also accommodate scholarships under the Quota Scheme.

Strengthening the role of SIU would also entail allocating a stronger responsibility for qualitative assessments of partnerships and applications making SIU's role less administrative and more strategic in the case of the Quota Scheme. Specific criteria for what should be considered relevant courses, strong partnerships, and eligible degrees would need to be operationalized in dialogue with both the Ministry of Education and Research and Norad. Alignment with overall internationalisation strategies on an institutional level could also be considered as part of the review.

With a stronger and more strategic role, SIU's reporting procedures should be revamped. Data collection for monitoring should be aligned with goals set out in institutional internationalisation strategies. Institutions should be asked to report on indicators that are relevant to the development of the Quota Scheme, and that can be used to measure progress against agreed parameters. The data collection should balance general approaches with institutional difference, and keep the number of required indicators to a minimum.

The distribution of roles and responsibilities would be as follows:

**Ministry of Education and Research:**

- Allocate budget with allocation to SIU and
- Defined list of eligible countries, defined in collaboration with Norad and the Ministry of Foreign Affairs'
- In dialogue with SIU, operationalize eligibility and review criteria including definition of partnerships, eligible degrees

**SIU**

- Issue call for proposal at established intervals
- In dialogue with Ministry of Education and Research and Norad , propose and implement application review procedures
- Establish requirements for student selection through open calls and ensuring gender representation
- SIU could consider more actively tapping into the existing joint degree facility, but also opens for tailored degrees
- Revamp reporting procedures to reflect objectives in applications and objectives of the quota Scheme with regards to both internationalisation and development

**Norwegian university/university colleges:**

- Prepare applications that incorporate (i) alignment with institutional strategies for internationalisation, (ii) demonstrated relevance and partnership participation on degrees offered in dialogue with partner institution, Norad, and NOKUT
- Establish scholarship facility with earmarked funding provided by SIU, similar to existing models under Erasmus Mundus

**Students:**

- Applies to institution in Norway, through open calls all issued at partner institution and beyond.
- Sign a contract that says that he or she intends to return home upon completed studies

**Other entities:**

- Visas would still have to be processed by the Directorate for Immigration and the Norwegian tax authority must still issue ID numbers, but the Norwegian State Educational Loan Fund would no longer be involved

**6.3.4 Implications of the recommendations for institutions**

The proposed changes also entail implications that more directly affect the institutions. Specifically, more concentration and more requirements for academic content related to quota student uptake would limit the number of Norwegian higher education institutions participating in the Quota scheme. On the flipside, those that participate would likely have stronger effects of the Quota Scheme, both in terms of their internationalisation and the part of

their funding that follows from ECTS and numbers of incoming students.

Notably, the concentration would not necessarily follow only the larger institutions or only the institutions with strong international research partnerships. Some of the smaller university colleges (for example Molde and Narvik) that already receive a relatively high number of quota students for a limited number of degrees may well continue to do so. They would however need to present a holistic plan for the study programmes offered to quota students and how these programmes related to country needs, home universities, or student demand.

In current quota countries, some may find themselves excluded from a revised quota Scheme. For countries that have a very small number of students enrolled, however, this will constitute a marginal ef-

**FIGURE 6.1**  
Proposed changes to the Quota Scheme

Student selection	<ul style="list-style-type: none"> <li>• More transparent student selection procedures</li> <li>• Fewer eligible countries</li> <li>• Revive and operationalise partnership requirement</li> </ul>		
Course selection	Requirement of joint applications with partner institutions to demonstrate relevance	Requirement of tailored degrees developed in dialogue with partner institutions as a basis for student intake	Requirement of joint degrees as a basis for student intake
Administration	<ul style="list-style-type: none"> <li>• Centralized funding for both degree development and student financing within SIU</li> <li>• Award two types of funding to institutions</li> <li>• Review reporting requirements to agreed indicators that can be used for monitoring and management</li> </ul>		

fect on national development. For home universities, a shorter list and more slots per institution may instead increase predictability and influence and in turn also relevance.

## 7 Annex: Literature review – Methodology

### 7.1 Annex 1: Literature review

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An extensive literature review of programme documents, related policy papers, budget propositions, and earlier reviews has informed the analysis of the programme logic, the programme's development over time, its alignment with national development and educational policies, and international best practice.

Mapping of costs and the analysis of administrative procedures also largely draws from literature review in addition to information from the affected units, as the educational institutions themselves.

We have also gone through and to some extent used available statistics and information from SIU concerning the educational institutions and their quota students. This in addition to the registry data and the information and data we have collected on our own.

### 7.2 Annex 2: Semi-structured interviews – Methodology

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In this project, we conducted a total of 52 interviews. The interviews covers Norwegian educational institutions and other stakeholders in Norway, and educational institutions in selected developing countries in the scheme. In interviews with the Norwegian institutions, we tried to capture if there were any specific reasons interviewing institutions in some of the countries that fall under the scheme, but that is not seen as developing countries, to illuminate relevant factors, which would not be captures in the other interviews that we conducted. Based on our reviews, we found no basis for this.

Interviews with Norwegian institutions and stakeholders have mainly been conducted as group interviews, but some are individual. It also varies if the interviews are conducted by telephone or not. Most of the interviews conducted in the quota countries are individual and by telephone or Skype.

All of the interviews that we have conducted are open interviews. This means that the questions that we have asked are more thematically organised than detailed, and the interviewees are free to respond as they wish.

The advantage of this method is that all the respondents are asked the same questions, but the interviewees can respond as they like. In this way we get to examine the same issue in different ways, based on what is important to each respondent.

#### Norwegian educational institutions

Overall, we have conducted 27 interviews with representatives from 11 Norwegian educational institutions, of which 20 interviews are conducted with representatives from both administrative and academic staff and seven of the interviews are conducted with the principal, deputy principal or equivalent at seven educational institutions.

The following factors are taken into account in the selection of institutions:

- Variations in the institutions' size, included the five largest universities in Norway as received more than 50 percent of all quota students from 1994 until today
- Variations due to geographic location
- The institutions' international profile
- Variation in educational provision and profile

The 11 educational institutions are:

- University of Oslo
- University of Bergen
- Norwegian University of Science and Technology
- University of Tromsø
- Norwegian University of Life Sciences
- University of Nordland
- Molde University College
- Oslo and Akershus University College
- Narvik University College
- Stord/Haugesund University College
- Diakonhjemmet University College

There has been conducted seven interviews at management levels at the following seven educational institutions:

- University of Oslo
- University of Bergen
- University of Tromsø
- Norwegian University of Life Sciences
- Norwegian University of Science and Technology
- Molde University College
- Narvik University College

#### Other stakeholders in Norway

We have conducted six interviews with representatives from the Ministry of Education and Research, the Norwegian State Educational Loan Fund and SIU, the Norwegian agency for Development Cooperation and the Ministry of Foreign Affairs.

Here are people from management and employees who work with and know the Quota Scheme in-depth interviewed.

#### Educational institutions in quota countries

We have conducted 19 interviews with coordinators or equivalent at 15 educational institutions or units in eight quota countries.

The eight countries are Bangladesh, Ethiopia, Ghana, Nepal, Sudan, Tanzania, Uganda, Vietnam and Zambia.

The 15 educational institutions or units have institutional arrangements with Oslo and Akershus University College, the Norwegian University of Science and Technology, the University of Bergen, the University of Oslo, the University of Tromsø and the Norwegian University of Life Sciences.

The following factors are taken into account in the selection of institutions:

- High number of quota students
- High number of cooperation agreements
- Priority in Norwegian Development Policy

The 15 institutions or units are:

- University of Dhaka, Bangladesh
- University Rajshahi, Bangladesh
- Addis Ababa University, Collage of Education and Behavioural Studies, Ethiopia
- Addis Ababa University, Akililu Lemma Institute of Pathbiology, Ethiopia
- The University of Ghana, Ghana
- Kathmandu University, Nepal
- Tribhuvan University, Nepal
- University of Khartoum, Sudan
- Sokoine University of Agriculture, Tanzania
- Songea Teachers College, Tanzania
- Muhimbilib University of Health and Allied Sciences, Tanzania
- The National Institute for Medical Research, Tanzania

- Hue University, Vietnam
- Nha Trang University, Vietnam
- University of Zambia, Zambia

### 7.2.1 Annex 3: Interview guides

#### Interview guide – Representatives from the universities and university colleges

1. Introduction
  - Ask each person to say something about his/hers work with the Quota Scheme.
2. Overall questions
  - The importance of KO for the institution
    - Do you have quota students at PhD-level?
    - Is it mainly students or employees from the partner institutions that arrive?
    - Are there special challenges having quota students at PhD-level?
3. The importance of the Quota Scheme for the quota countries
  - Do you enrol students from both «south and east»?
  - Do the Quota Scheme have the same importance for the institutional cooperation both to the institutions in south and east?
  - Will the institutional cooperation maintain without the Quota Scheme?
  - Do the Quota Scheme have significance for recruitment of international students/students from the quota countries?
4. The emphasis of the two objectives
  - Would you say that the Quota Scheme is a significant instrument promoting the opportunity to collaborate with other educational institutions, secure relevance and quality of the education etc.?
  - Alternatively, would you say that the Quota Scheme gives the opportunity to promote development in the quota countries?
5. The institutions' internationalisation strategy/The importance of the Quota Scheme for the institutions' strategy
  - Is the Quota Scheme central to support the institution's internationalisation strategy?
  - Would it have been difficult to achieve the strategy's objectives if the scheme had not existed?
6. The institutional cooperation/The Quota Scheme and the significance of the institutional cooperation
  - Do the institution use the Quota Scheme primarily to maintain existing agreements or to establish new agreements?
  - Is the Quota Scheme essential to establish cooperation on research projects?
  - Would the institution could have maintained the desired collaborations without the Quota Scheme?
7. Recruitment through agreements
  - How are cooperation agreements and joint ventures used in the recruitment of quota students?
  - What criteria are important when the institution consider applications for admission under the Quota Scheme? Is the gender aspect taken into account?
8. Recruitment to specific disciplines
  - Are the Quota Scheme used to recruit students to priority areas/disciplines?
  - Is the priority disciplines at the institution in the quota countries, and what is important for the countries' development when recruiting quota students to Norway?
9. NOMA and NUFU
  - Do the institution relate the Quota Scheme to NOMA, NUFU or other programmes focusing on developing countries? How?

10. The quota students
  - Why do the quota students come to Norway/to the institution?
  - Do you think that the Quota Scheme is crucial to the quota students for coming to this institution?
  - Do you think that the Quota Scheme is crucial to the quota students to study abroad?
  - Do you think that the Quota Scheme gives the students the opportunity to get an education they would not otherwise have gotten?
  - Is the institution's educational provision crucial? Had the students received the same education elsewhere?
  - What do you think is the main reason why students come here, choosing between economic conditions and academic provision?
11. Do the Quota Scheme affect the institution's international environment?
  - Are the quota students different than other (international) students? How?
  - Would the international environment at the institution have been affected by an unwinding of the scheme?
12. Do they work?
  - What do you know about the students' employment before they come to Norway?
  - Are they working? In public or private sector? What are they doing if not working?
13. Where do they go?
  - Do you know whether they stay in Norway, return home or go to another country?
  - What do you know about the students' employment after leaving Norway?
  - Do the institution have contact with some of the earlier quota students?
14. Resources/The institution's administrative costs
  - Is the Quota Scheme resource-intensive to manage for the institution? Why?
15. Alternatives to the Quota Scheme
  - Can the Quota Scheme be better utilised for the benefit of the institutions, the quota students and the quota countries?
16. Can the funds used in the Quota Scheme be used in other manner, and provide greater benefit to the institutions, the quota students and quota countries? How?

### Interview guide – Management at the universities and university colleges

The interviews will mainly revolve around the following two themes:

- Key focus areas and challenges related to internationalisation in higher education and internationalisation at the educational institutions.
- Information on the process and anchoring of the distribution of quotas internal at the educational institution from a management perspective.

Questions:

Internationalisation

- How do you understand the concept «internationalisation in higher education»? How is this reflected at your institution?

- What are the major focus areas for institutional internationalisation strategy?
- What do you think are the main challenges to achieve internationalisation of the institution?

#### Process and anchoring

- What are the criteria used when quotas are internal distributed at the institution?
- What is the significance of the institution's internationalisation strategy for the allocation process?
- At what level is these decisions taken?
  - Does the management at the university, the university board etc. interact with the allocation procedure? How?
  - Is authority delegated, and to whom?

### Interview guide – Educational Institutions in Developing Countries

#### 1. Number and selection of students for the Quota Scheme

- How many Quota Scheme students have been sent to Norway over the last five years?
- How are the candidates selected (specific fields, academic excellence)? Are there candidates who come from outside the university (particular sectors of the economy, ministries/public offices etc.)?
- Is gender a selection criterion? Are there any gender targets or objectives?

#### 2. The Quota Scheme and its links to Norwegian universities

- Apart from providing graduate level fellowships, are there other reasons for sending students to Norway under the Quota Scheme?
- Is your university part of NUFU/NOMA/NORHED or any other Norwegian-funded research programmes? Do the Quota Students have any links to these – if so, which?
- Your institute/university has one or more institutional agreement/s with Norwegian university/yes. Is the Quota Scheme part of the institutional agreement – if so, how? Does the Quota Scheme play any role in your university's strategies/plans? Do you send Quota Scheme students only to universities where you have agreements?

#### 3. Norway's Quota Scheme compared to other fellowship programmes

- Which other international fellowship programmes can your students apply for? What are the major differences – positive and negative – compared with the Quota Scheme?

#### 4. The value of the Quota Scheme

- What is the (approximate) percentage of students that return after finishing their studies under the Quota Scheme? How many have returned to your institution? Are they still in country five years after returning from Norway?
- Do the Quota Scheme students who return to your university bring other skills apart from their academic qualifications? What are they, how do they contribute to the university (this is an important issue that we hope we can spend some time discussing)?
- If you were to reform Norway's Quota Scheme, what would you change? If a key objective is to build capacity in partner countries, how could the funding be used in a more effective way?

### 7.3 Annex 3: Registry data – Methodology

In order to map what characterise the quota students regarding gender, country of origin, field of study and educational institution in Norway etc. this evaluation combines micro level data from Statistics Norway and the Norwegian State Educational Loan Fund.

The Norwegian State Educational Loan Fund's dataset contains 5,844 individuals, covering the period 1994-2013.<sup>37</sup> Data delivered by Statistics Norway covers the period 2000-2012 and they were able to identify 5,555 quota students in their data.<sup>38</sup> Due to missing data on almost all variables, we have dropped two of these students in our analysis. Thus, our descriptive statistics covers 5,553 quota students.

For some observations there are discrepancies between the two data sets, e.g. an individual is according to the Norwegian State Educational Loan Fund enrolled at a Norwegian university/university college, but not according to Statistics Norway. The former data set is our only source to determine which year(s) an individual is active as a student under the Quota Scheme. Due to the described discrepancies field of study is missing for some of the quota students. Where possible we have replaced the missing field of study with the field of study the prior or following year. In addition, if an individual completed his/hers quota studies before 2000 we do not know their field of study.

When looking at the quota students' field of study we have chosen to do this for their highest level of

education. Thus, if a student have taken classes at both bachelor and master's level we only look at his/hers field of study at master's level.

The Norwegian Standard Classification of Education (NUS) gives information on both level and field of education. Each year that an individual is registered as an active student by Statistics Norway, he/she is assigned a code, where the first number tells us the degree level and the second number the field of study. Quota students are enrolled at level 6 (bachelor's), 7 (master's) or 8 (PhD).

In order to determine how many of the quota students that have completed a degree under the Quota Scheme we have made some assumptions based on each level of degree's standard time-to-degree. The following assumptions apply:

- A student has completed a bachelor's degree if he/she is registered as an active student at level 6 for at least three years.
- A student has completed a master's degree if he/she is registered as an active student at level 7 for at least two years.
- A student has completed a doctoral degree if he/she is registered as an active student at level 8 for at least three years.

According to these assumptions, we find that 4,545 quota students have completed at least one degree under the Quota Scheme.<sup>39</sup> One may discuss the assumption regarding a doctoral degree. Standard time-to-degree is three years if the student does not engage in teaching during his/hers PhD studies. However, out of the 507 individuals we have defined

their studies in 2012 have per our definition not been able to graduate within the time period of our data.

<sup>37</sup> There is no information regarding the individuals' studies in 2013

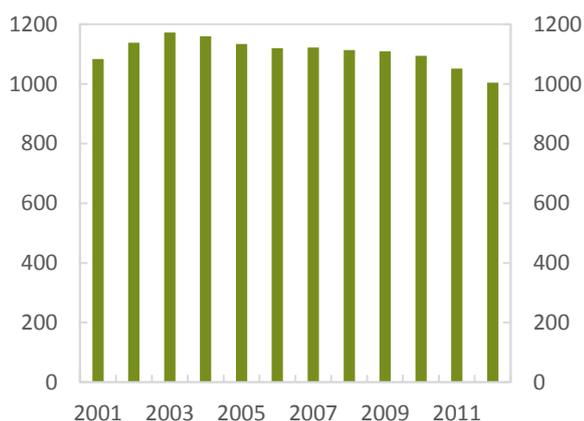
<sup>38</sup> Statistics Norway matched individuals by their social security number

<sup>39</sup> This leaves 1,008 quota students without a degree. Students starting their bachelor's or PhD studies after 2010, and master's students starting

as PhD graduates, 203 are registered at this level of education for four years.

Of the 5,553 quota students in our data, the Norwegian State Educational Loan Fund registered 1,004 active students in 2012 (cf. figure A). Given that our data only covers the years up until 2012, we cannot say whether these students graduated in 2012 or if they continued studying in 2013.

**FIGURE A**  
Number of active quota students, 2001-2012



Source: Registry data from the Norwegian State Educational Loan Fund and Statistics Norway

## 7.4 Annex 4: Survey data – Methodology

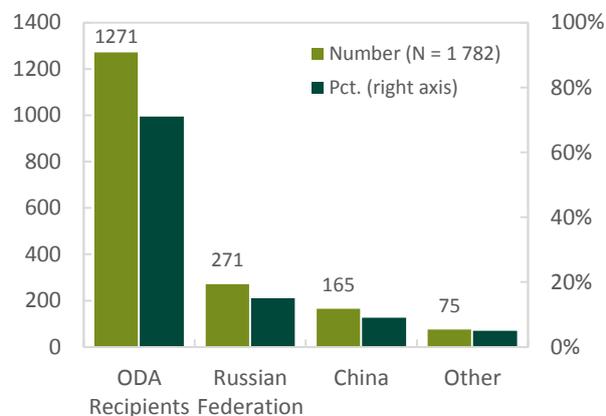
A survey invited all former and current quota students dating back to 2001 to provide inputs on an elaborate set of questions addressing most aspects of the scheme. The survey collected information on fields of study across institutions, student origin, time-period, gender, and informed on motivation and rationale, other academic and work trajectory, and self-assessment of individual effects.

The survey was conducted electronically using Enalyzer Survey Solution. The Norwegian State Educational Loan Fund provided us with the contact information.

The survey was sent out to 3,827 individuals at the end of October 2013. Of these, 256 e-mail addresses was no longer working, leaving us with 3,571 respondents. As many as 1,782 former and current quota students completed the survey, resulting in a response rate of 50 percent.

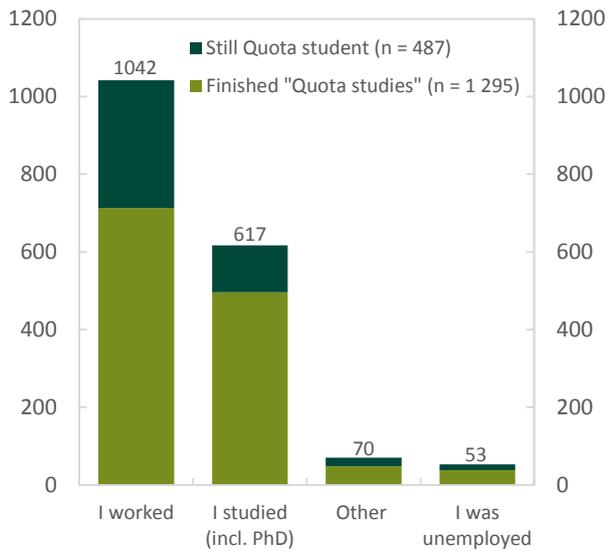
Selected responses are included in the following.

**FIGURE A**  
Country of origin



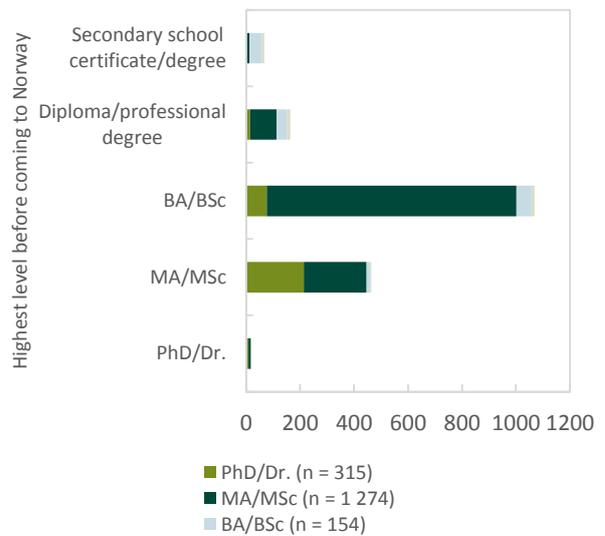
Source: DAMVAD

**FIGURE B**  
Main occupation before quota studies



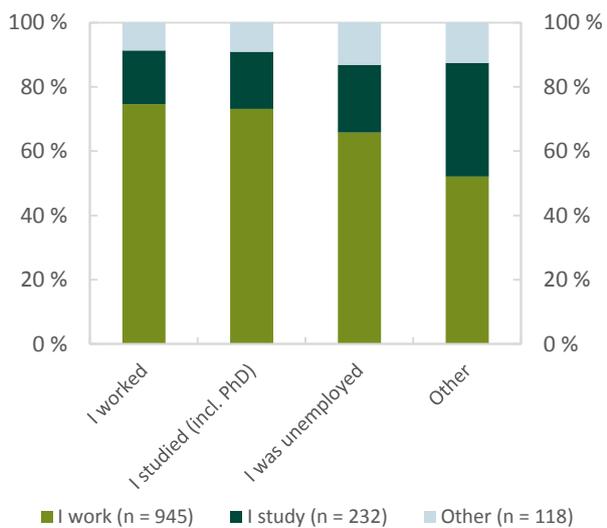
Source: DAMVAD  
Note: N = 1,782

**FIGURE D**  
Highest level of education before quota studies and highest level of education under the Quota Scheme



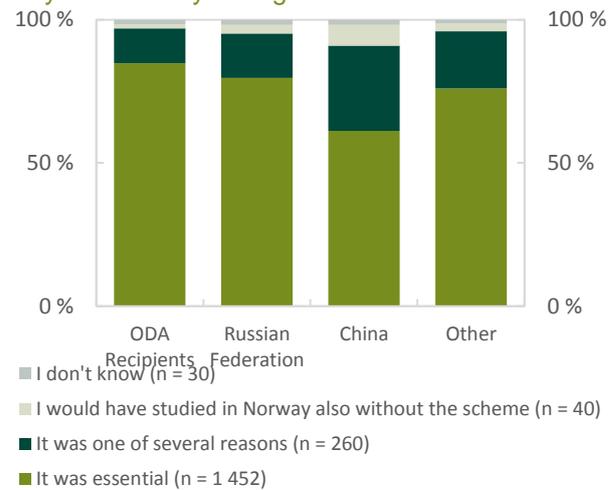
Source: DAMVAD  
Note: N = 1,782

**FIGURE C**  
Main occupation before quota studies and current occupation



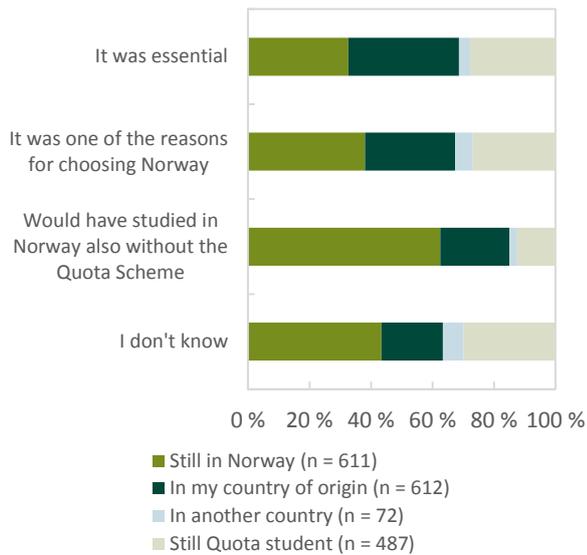
Source: DAMVAD  
Note: N = 1,295

**FIGURE E**  
Importance of the Quota Scheme for choosing Norway and country of origin and



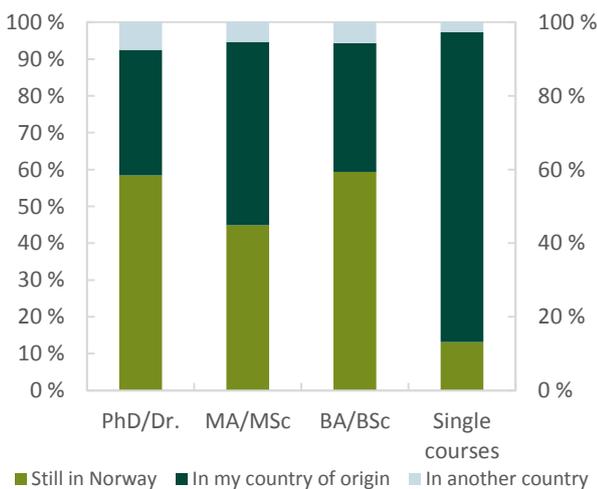
Source: DAMVAD  
Note: N = 1,782

**FIGURE F**  
Importance of the Quota Scheme for choosing Norway and currently living



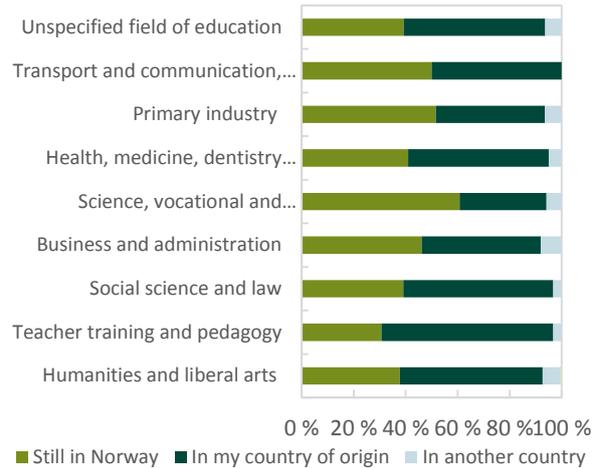
Source: DAMVAD  
Note: N = 1,782

**FIGURE G**  
Highest level of education under the Quota Scheme and currently living



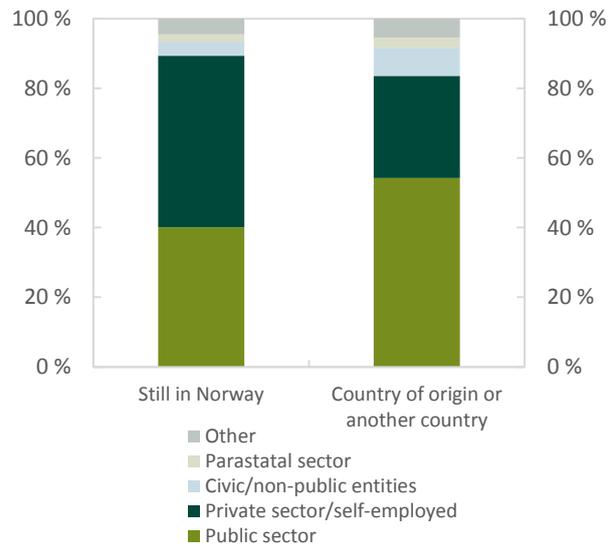
Source: DAMVAD  
Note: N = 1,295

**FIGURE H**  
Field of education under the Quota Scheme and currently living



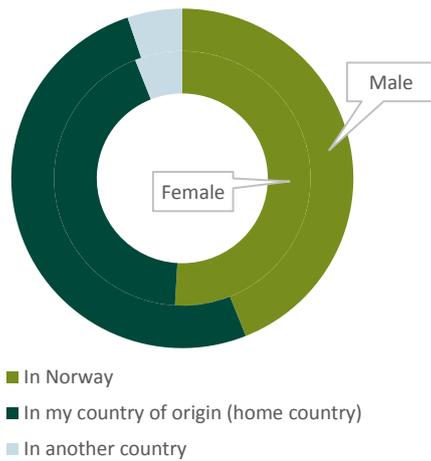
Source: DAMVAD  
Note: N = 1,295

**FIGURE I**  
Currently living and sector of current employment



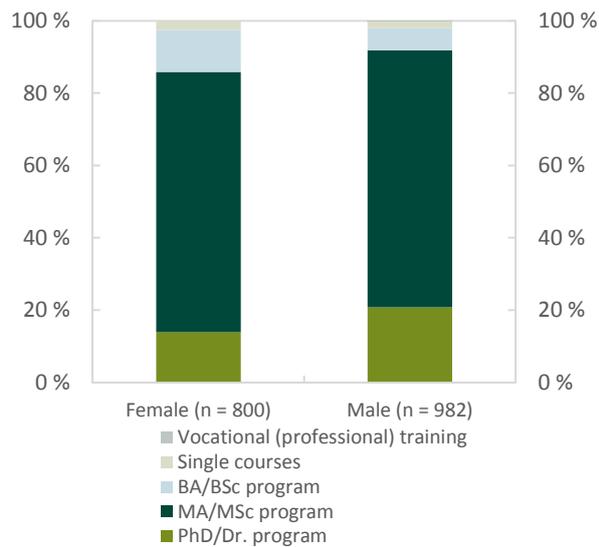
Source: DAMVAD  
Note: N = 945

**FIGURE J**  
Gender and currently living



Source: DAMVAD  
Note: N = 1,295

**FIGURE K**  
Gender and level of education in Norway



Source: DAMVAD  
Note: N = 1,782

## 7.5 Annex 5: Tracing students through LinkedIn – Methodology

In the survey sent to former and current quota students, we asked for access to the respondents' LinkedIn addresses so that we could examine their profile and conduct a tracing analysis.

The purpose of such an analysis is to map the quota students' onwards trajectory and to underpin the other methods used in the project.

We focused in particular on the following matters:

- The time from graduation to work
- Where the person works (geographical)
- In which sector he or she works
- Educational relevance to the job
- His or her career pathway
- His or her professional network, included connections to Norwegian educational institutions

We got access to 575 LinkedIn addresses, of which 354 were active and contained relevant information. Findings from the analysis:

**TABLE A**  
Gender

	Female	Male	Total
<b>Number</b>	149	205	354

**TABLE B**  
Current residence

Location	Number
<b>In my home country</b>	146
<b>Norway</b>	108
<b>Another country</b>	17
<b>Unknown</b>	83
<b>Total</b>	354

**TABLE C**  
Current occupation

Occupation status	Home country	Norway
<b>Work</b>	126	72
<b>Study</b>	8	25
<b>Other</b>	12	11
<b>Total</b>	146	108

**TABLE D**  
Sector by current residence

Sector	Home country	Norway
<b>Public sector</b>	70	20
<b>Private sector/self-employed</b>	33	38
<b>Civic/non-public entities</b>	9	5
<b>Parastatal</b>	5	3
<b>Other</b>	8	6
<b>Unknown</b>	21	36
<b>Total</b>	146	108

**TABLE E**  
Industry by current residence

Industry	Home country	Norway
<b>Research and teaching</b>	59	22
<b>Consultation and service</b>	15	9
<b>Oil and energy</b>	10	22
<b>Industry</b>	6	12
<b>Health care</b>	4	1
<b>NGO</b>	1	1
<b>Public</b>	2	3
<b>Religion</b>	2	
<b>Entertainment/culture/media/creative/tourism</b>	4	7
<b>Self-employed</b>	1	
<b>Unknown</b>	42	30
<b>Total</b>	146	107

**TABLE F**  
Industry (all LinkedIn-profiles)

All profiles, including those with unknown occupational status	
Research and teaching	109
Health and care	7
Industry	19
Maritime	3
NGO	2
Public	7
Oil and energy	35
Religion	2
Consultation and service	30
Self-employed	1
Entertainment/culture/ media/creative/tourism	14
Unknown	125
<b>Total</b>	<b>354</b>

## 7.6 Annex 6: Bibliometric survey

The evaluation conducted a bibliometric survey on the collaborations between Norwegian institutions and researchers in quota countries. The survey is referred to in chapter 4.

The objective of the survey was to assess:

- The number of co-written publications from the quota countries and the 11 Norwegian institutions selected for the analysis.
- Research collaboration (i.e. international and collaboration with industry) as indicated by co-publication of scientific articles.

While findings cannot necessarily be attributed to the Quota Scheme itself, they provide insights on two aspects: First, data on institutional collaborations indicate the depth of institutional partnerships between Norwegian universities and university colleges and their counterparts in countries that send quota students to Norway. Second, the extent of

publications co-authored by quota students indicate their academic level, to which the Quota Scheme may have contributed.

### 7.6.1 Main findings

The main findings from the bibliometric survey are:

- A total of 7,196 publications were produced in the last decade in collaboration between researcher at one of the 12 Norwegian institutions and at least one of the quota countries.
  - The number of joint publications between Norwegian universities and universities in quota countries have increased from 239 in 2003 to 658 in 2013.
  - Norwegian university colleges have fewer publications and fewer joint publications. From 2003 and onwards the number of university college publications with quota countries increased from 4 to a total of 132 in 2013.
- Norwegian universities publish primarily with academics from the Russian Federation, China, Brazil, and South Africa. The university colleges collaborate primarily with China, India and Brazil.
- Five universities and one university colleges have published with former quota students. The majority of quota students that later act as authors origin in China.

The total number of publications that Norwegian educational institutions publish jointly with institutions in quota countries are presented in table A.

**TABLE A**

Number of publications per institution, with an author from a quota country, from 2003 to 2013

Institution	Publications
University of Oslo	2,543
University of Bergen	2,384
University of Tromsø	620
Norwegian University of Science and Technology	1,221
Norwegian University of Life Sciences	564
Oslo University college	27
Akershus University College	21
Bodø University College	41
Narvik University College	89
Stord/Haugesund University College	20
Molde University College	8
Diakonhjemmet University College	20

Sources: DAMVAD and Scopus

Norwegian universities and university colleges collaborate most with the Russian Federation and China. Besides the Russian Federation and China, other countries with a large amount of collaborations are Brazil, South Africa and India (table B).

The number of publications co-authored with China is increasing for all universities and is having the highest increase rate for all quota countries. In between 2003 and 2013 the yearly increase rate is 49 percent (77 percent between 2003 and 2012).

The top five collaborating countries shown in table C represent approximately 50 percent of all publications the institution has with the quota countries. As such, the majority of the quota countries (112 in to-

tal) have very limited contributions to the overall collaboration patterns for the institutions included in the analysis.

Tanzania and South Africa is the only countries outside the BRIC group that has a substantial number of co-authored publications with the two universities. The University of Tromsø mainly co-publishes with BRICS countries.

The Norwegian University of Science and Technology collaborates extensively with China. From 2007 to 2009 co-publications with India approached the level of China, but afterwards reverted to the former level. Among the top five co-publishing countries with the Norwegian University of Science and Technology is also Iran. The topics of the publications, the top three topics are Control and Systems Engineering, Environmental Science and Atomic and Molecular Physics, and Optics.

The collaboration patterns for the Norwegian University of Life Science is different to the other four universities when it comes to the top five collaborating countries. Among the five, only one BRICS country is present and only two (China and Tanzania) countries are present among the primary collaborating partners for the other universities. Ethiopia is the top co-publishing country and is the leading country throughout the period except for two years, 2005 and 2010. The other “new” country in this setting is Nepal, which is the only top five country that contribute to a steady number of publications with the Norwegian University of Life Science.

As mentioned in the introduction the second objective of the analysis was to assess to what degree the quota students are able to co-publish with academic staff at their host institution in Norway.

Analysing this, faces a number challenges, among which the unique identification of the quota student as co-author for publications is the major one. In order to establish if the quota-student is acting as co-author we used geographical location of the 12 institutions in the analysis and the postal location of the quota student. If these two matched and the name of the quota student is identified as author we estimate that the likelihood of finding the same person is sufficiently high to count this as an indication of a quota student being co-author of a scientific publication. Even though the results presented below indicates that caution should be taken in inter-

pretation of the results. As an example we find a relative high share of authors from South Africa which names matches to quota students but the number of student from South Africa is at least in 2012 rather low, 7 in total. This could indicate a mismatch of between the African names, but since the postal addresses of the student are matched well with the universities, we are confident that the procedure followed with success matches the authors and the quota student.

Results are presented below:

**TABLE B**

Number of co-publications by country (top five countries). 2003-2013.  
Fractionalized number of publications per country in brackets

Institution	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
<b>University of Oslo</b>	China (239)	Russia (130)	South Africa (72)	India (65)	Brazil (60)
<b>University of Bergen</b>	China (132)	Russia (99)	Tanzania (60)	South Africa (57)	India (53)
<b>University of Tromsø</b>	Russia (82)	China (46)	South Africa (28)	India (13)	Brazil (6)
<b>Norwegian University of Science and Technology</b>	China (198)	India (74)	Russia (52)	Brazil (32)	Iran (29)
<b>Norwegian University of Life Sciences</b>	Ethiopia (40)	China (24)	Tanzania (19)	Uganda (17)	Nepal (12)
<b>Oslo University College*</b>	China (4)	Brazil (2)	South Africa (2)	Armenia (1)	Russia (1)
<b>Akershus University College*</b>	Mali (2)	Brazil (2)	Pakistan (1)	Iran (1)	South Africa (1)
<b>Bodø University College</b>	Brazil (3)	Ghana (2)	China (1)	Thailand (1)	-
<b>Narvik University College</b>	Russia (7)	China (2)	India (2)	South Africa (1)	Thailand (1)
<b>Stord/Haugesund University College</b>	India (5)	Iran (2)	Pakistan (2)	Ukraine (1)	-
<b>Molde University College</b>	Brazil (1)	China (1)	-	-	-
<b>Diakonhjemmet University College</b>	Russia (1)	Zambia (1)	-	-	-

Source: DAMVAD and Scopus

\*Oslo University College and Akershus University College merged in 2011

**TABLE C**

Numbers of publications with quota students as co-authors

Institution	No. of publications
University of Oslo	110
University of Bergen	49
University of Tromsø	2
Norwegian University of Science and Technology	15
Norwegian University of Life Sciences	13
Oslo University college	3

Kilde: DAMVAD

The University of Oslo tops the list and publishes twice as much with quota students as the University of Bergen.

Most of the students found as co-authors are Chinese. China is the third most frequent country in

terms of number of quota students, hence outperforms the others in number of publications per student.

Conversely, the high number of quota students from the Russian Federation is not reflected in their share of co-authors.

### 7.6.2 Methodology

When performing bibliometric analysis a number of challenges and limitations occur: First, only scientific work published in peer reviewed international journals can be included in the analysis. Second, most of the publication databases have a bias towards having better coverage of the natural medical sciences at the expense of social science and humanities.

**TABLE D**

The share joint publications by quota country and Norwegian institutions

Institution	1 <sup>st</sup>	2 <sup>nd</sup>	3 <sup>rd</sup>	4 <sup>th</sup>	5 <sup>th</sup>
University of Oslo	China (37.80 pct.)	Brazil (3.49 pct.)	Tanzania (1.91 pct.)	Russia (1.84 pct.)	Georgia (1.38 pct.)
University of Bergen	China (15.21 pct.)	Iran (6.69 pct.)	India (2.36 pct.)	South Africa (2.16 pct.)	Zambia (1.97 pct.)
University of Tromsø	South Africa (16.67 pct.)	China (7.14 pct.)	-	-	-
Norwegian University of Science and Technology	China (26.50 pct.)	India (5.90 pct.)	Azerbaijan (2.88 pct.)	Russia (2.64 pct.)	Iran (0.96 pct.)
Norwegian University of Life Sciences	Nepal (8.27 pct.)	China (4.76 pct.)	Tanzania (4.18 pct.)	Ethiopia (2.27 pct.)	Mali (2.27 pct.)
Oslo University College	China (24.07 pct.)	-	-	-	-

Source: DAMVAD 2013

**TABLE E**  
The 12 institutions\* in the search query

Institution
University of Oslo
University of Bergen
University of Tromsø
Norwegian University of Science and Technology
Norwegian University of Life Sciences
Oslo University College
Akershus University College
Bodø University College
Narvik University College
Stord/Haugesund University College
Molde University College
Diakonhjemmet University College

Source: DAMVAD

\*Oslo University College and Akershus University College merged in 2011

The first limitation is in the present analysis not likely to have any influence on the results since we solely focus on the scientific output from universities and university colleges, which by fact publish most if not all scientific results in academic journals. The latter limitation is taken care of by our choice of database since Scopus that we utilize for this analysis is generally recognized for being the publication database with the best coverage of the social science and humanities.<sup>40</sup>

The bibliometric analysis is based on data from the abstract and citation database Scopus, which contains 50 million peer-review records.<sup>41</sup> In order to retrieve all publications the selected Norwegian institutions published in collaboration with the quota

countries in between 2003 and 2013 both year included, a search queries for each institution where developed.

In order to get every published work in collaboration between the Norwegian institutions and quota countries, the following search criteria was used:

- Publication year
- An institution identifier
- A country identifier for the quota countries

The Search Query regarding the publication year was the following: "PUBYEAR > 2002".

For each institution, known synonym was included in the search query to ensure that we get full coverage. The Norwegian institutions that was used in this bibliometric analysis is shown in table E.

The following is an example of the specific search query for the University of Oslo: Affiliation ("Universitetet i Oslo" or "Universitet i Oslo" or "University of Oslo" or... )

For each of the quota countries English names were used to filter out all publications with affiliation to countries that represent the origin for the quota students.

An example: Affiliation country ("Afghanistan" or "Albania" or "Algeria" or "Angola" or "Armenia" or "Azerbaijan" or... )

Combining these queries resulted in 7,447 publications. Out of these, 251 publications did not contain data in the Affiliation Author field. As a result, these were excluded from the dataset. The remaining

<sup>40</sup> <http://www.elsevier.com/online-tools/scopus#>

<sup>41</sup> <http://www.elsevier.com/online-tools/scopus#>

7,196 publications were exported to Excel for further analysis.

In order to show which of the quota countries publish in corporation with the twelve Norwegian institutions, we identified each author's country of origin per publication. Based on this total and fractionalized number of publications per country is counted.

The changes in the number of publications for each of the Norwegian institution and the top five collaborating partners among the quota countries are shown in the respective sections and the appendix. The total number of publication were broken down by year for the period 2003 to 2013. In each of these years, the number of collaborations between the Norwegian Institution and the quota country is identified and the number for the five most important collaborators is reported.

In order to identify which of the authors in the dataset are quota students, the list provided by the Norwegian State Educational Loan Fund with all students who has participated in the program was used.

This data was compared to the data from Scopus, specifically the field "Authors". This resulted in 931 publications with name matches. One of the challenges with this method, are that the provided list with quota students' names and the list of author names in Scopus, which lies in the field "Authors" are not in identical format. Scopus use a name format that includes (surname, first name, middle name etc.) with first and middle name in capital letters only, while the list provided by the Norwegian State Educational Loan Fund lists the names in this format surname, first name, middle name. Even though the names are inverted in both examples, which rectifies the indexing format so that they are

alike, we still face problem differentiating the students from one another. This is in true the fact when students have common surname, like Chen, Wang, Liu etc. This problem is especially prominent amongst the Asian authors (for example, the dataset contains 84 different "Chen, X."). Therefore, it is difficult to pick out which of these authors are from the quota system.

In addition, we do not know how many and which of the surnames and middle names were used in the indexing of the publication, which could mean that we have authors on both list that cannot be identify uniquely.

In order to qualify this problem, we used the postal information for each student from their time in Norway as an indicator of where they got their master's degree or PhD. It is likely that former students are co-writing with their former educational institution rather than with institutions they did not attend while staying in Norway. We took the postal information, compared it to the geographical location of the institution, and found that the accuracy of the identification of quota student as co-authors is more reliable in this. However, one should be aware of the fact that we with the current data available only have limited changes to be sure that the student in fact is identical with the authors.

### **7.6.3 Annex 7: Relevance to national needs is an unrealistic target**

As discussed in chapter 3.1.4, linkages to the local labour market matter to development, and in 1989, the Flatin Committee noted as a shortcoming of the Quota Scheme that it overlooked national capacity needs in developing countries. And as also discussed earlier in this report, the inclusion of an objective to build stronger partnerships with home institutions, does not address institutional and finan-

cial capacities of home institutions, or support important linkages between students, partner institutions, and national labour market in a significant way.

The objective of benefiting the home country assumes an ability to know and address needs at a national level. Such responsiveness is both unrealistic and probably counterproductive for a university collaboration scheme. Collaboration with academic institutions with gap filling requires a programme that targets universities and their needs. Staying attuned to national competence needs and the labour market is the responsibility of these institutions in dialogue with their governments.

Moreover, skills needs are typically broad and comprehensive in developing countries. National poverty reduction strategies, or even university strategies, offer limited direct guidance on the match between skills needs and courses offered by the Quota Scheme. The most effective way to ensure relevance is probably through strong partnerships and regular consultation between academic institutions in the respective countries.

As a backdrop to the discussion of relevance, the evaluation consulted national and institutional strategies from four countries eligible under the Quota Scheme: Ethiopia, Ghana, South Sudan and Tanzania. In addition, the evaluation conducted labour market studies for Ethiopia, Ghana, South Sudan, Tanzania, and Nepal. The strategy documents are comprehensive and reveal a broad set of priorities, but understandingly no detail on numbers and levels of subjects needed in university education.

The most relevant documents found were (i) Poverty Reduction Strategy Papers (PRSPs) that lay out the overall macro programme, including for

growth and employment, and (ii) education strategies that include the university sector. The PRSPs typically note the need for closer linkages between higher education and research and more sustainable and high-growth development paths, but do not contain sufficient detail on capacity needs from tertiary education to inform priorities.

The Tanzanian Higher Education Development Programme 2010-2015 has some recommendations regarding the need to improve infrastructure and thus focus on highway engineering, and a series of sub-sector concerns including in primary industries. The strategy also emphasises factors that can improve university training, inspired by the factors noted in the World Bank SABER model. Ghana's PSRP, the *Ghana Shared Growth and Development Agenda* (GSGDA) 2010-2013, contains a more careful review of the growth options and hence some concerns about where skills scarcity exists. But the only study that uses an empirical review of the labour market as the driver for the analysis (Nuffic 2011) still ends up with such a wide list of concerns that it becomes difficult to see which fields of study that could *not* be justified as worthy of further support.

The University of Ghana in early 2013 defined its mission to become a research-based university that is to develop four centres of excellence, in (i) malaria, (ii) food security and crop improvement, (iii) poverty reduction, and (iv) environment and climate change. It had just a year earlier revised its PhD training to a more structured four-year programme, so together it is clear that training of junior staff with PhDs in key fields is strategic. Sokoine University of Agriculture (SUA) in Tanzania likewise has a series of programme areas for which it is mobilising research funds and building academic programmes.

The main observation from all these policy documents is that in order to get a good sense of needs and priorities over time, Norwegian higher educational institutions would need to work in close partnership with partner institutions to understand their contexts and fill specific identified gaps. The labour market studies mainly demonstrate that skills needs in all five countries covered are broad. Technical and managerial skills across the private and public sector are particularly lacking, as is overall availability of higher education opportunities.

**TABLE 7.1**  
Distribution of subjects by gender

Field of education	Female		Male	
	Number	Percent	Number	Percent
Humanities and arts	462	18.6 %	504	16.4 %
Education	135	5.4 %	109	3.6 %
Social sciences and law	393	15.8 %	438	14.3 %
Business and administration	433	17.5 %	260	8.5 %
Natural sciences, vocational and technical subjects	509	20.5 %	1,196	39.0 %
Health, welfare and sport	363	14.6 %	325	10.6 %
Primary industries	100	4.0 %	107	3.5 %
Transport and communications, safety and security and other services	40	1.6 %	67	2.2 %
Unspecified field of study	17	0.7 %	27	0.9 %
Missing	28	1.1 %	36	1.2 %
<b>Total</b>	<b>2,480</b>	<b>100 %</b>	<b>3,069</b>	<b>100 %</b>

Source: Registry data from the Norwegian State Educational Loan Fund and Statistics Norway

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