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JOINT NORDIC ORGANISATIONAL ASSESSMENT OF THE NORDIC DEVELOPMENT FUND (NDF)

Stephen Spratt, Eilís Lawlor, Kris Prasada Rao and Mira Berger

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List of acronyms

ADB	Asian Development Bank
AfDB	African Development Bank
AGF	African Guarantee Fund
CEO	Chief Executive Officer
CIO	Climate Investor One
CPI	Climate Policy Initiative
CRAFT	Climate Resilience and Adaptation Finance and Technology Transfer Facility
DAC	Development Assistance Committee
DFI	Development Finance Institution
EEP	Energy and Environment Partnership
EQ	Evaluation Question
ESG	Environmental, Social and Governance
GGF	Green Guarantee Facility
IDA	International Development Association (World Bank)
IDB	Inter-American Development Bank
LICs	Low Income Countries

MDBs	Multilateral Development Banks
MFA	Ministry of Foreign Affairs
M&E	Monitoring and Evaluation
MOIT	Ministry of Industry and Trade (Vietnam)
NAMA	Nationally Appropriate Mitigation Actions
NCF	Nordic Climate Facility
NDF	Nordic Development Fund
NEFCO	Nordic Environment Finance Corporation
NGOs	Non-governmental organisations
NIB	Nordic Investment Bank
OECD	Organisation for Economic Co-operation and Development
PAGRICC	Programa Ambiental de Gestión de Riesgos de Desastres y Cambio Climático
PS	Private Sector
RG	Reference Group
SDG	Sustainable Development Goal
SMEs	Small and medium-sized enterprises
SROI	Social Return on Investment
SSA	Sub-Saharan Africa
ToC	Theory of Change
USP	Unique Selling Point
WACA	West Africa Coastal Areas Management Program
WB	World Bank

Foreword by the EBA

The Paris Agreement on climate change states that the world needs to redirect financial flows to become compatible with a path towards low greenhouse gas emissions and climate resilient development. Mobilising funds from both the public and private sector is vital.

In 2009, twenty years after its establishment, the Nordic Development Fund (NDF) received a new mandate, transforming it from being an DFI promoting economic and social development in general to start focus its operations on climate change investments using a range of financial instruments. A challenge fund, the Nordic Climate Facility (NCF) was also set up to support innovative cutting-edge climate projects with higher risks. Since then, many new international instruments and funds have been launched and much more recourses have been mobilised, thus the global climate financing landscape of today is different, and it develops rapidly.

This study seeks to assess the performance of the NDF in relation to its mandate but more importantly, the fund's potential future role as a joint Nordic financing instrument assessing how strong its added value is from an international perspective. The assessment is a joint initiative and venture between the evaluation units of the MFAs in the Nordic countries, though it has been managed by the EBA. With its specific set up and operations, the NCF faces particular challenges but also potentials and it was therefore [and in conjunction with the NDF] decided to evaluate the facility separately, however by the same evaluation team. Due to both cost-effective and analytical reasons we satisfactory ended up merging the two assignments into one report.

Conclusions from the report point to the fact that NDF do add value to the international arena by for example deploying finance with varying degrees of concessionality in flexible and quick ways. But to leverage even more, the authors propose that the challenge fund needs to be more integrated into the NDF and that the Nordicness of investments must be better articulated. As with many assessments and evaluations in the development sphere the lack of impact data is evident also in this case, but possibly even more problematic in this area. Given the urgency of the climate change challenges, the need to learn about the effects of investments aimed at climate change mitigation and adaption is acute. The "new" NDF needs to learn about its impact even more than the "old" NDF, since climate financing might be an even more unchartered area than socio-economic development in general.

This report proves to be both timely and policy relevant as the Nordic governments faces a decision of whether to replenish the NDFs capital or not. It is my hope that the report will provide valuable insights and learning for the Swedish MFA and Sida and that it find its intended audience among a broad public with an interest in development cooperation and in particular climate financing mechanisms.

The authors' work has been conducted in dialogue with our Nordic colleagues via a reference group, chaired by Eva Lithman, member of the EBA. However, the authors are solely responsible for the content of the report.

Gothenburg, September 2019

Helena Lindholm, EBA Chair

Sammanfattning

Under 2019 kommer styrelse och ägare att lägga fast framtiden för Nordiska utvecklingsfonden (NDF). Som stöd för deras överväganden har en obereoende utvärdering beställts. Utvärderingens uppdrag var att bedöma NDFs verksamhet, fondens mervärde ur internationellt och Nordiskt perspektiv, samt hur fonden kan stärkas inom dessa områden.

Utvärderingen har haft två syften. Det första är att bedöma NDFs verksamhet i förhållande till dess mandat. Det andra är att bedöma NDFs framtida möjligheter att fungera som ett gemensamt Nordiskt verktyg för internationell utveckling. Huvudsakliga målgrupper för denna rapport är NDFs styrelse och ledning, Nordiska ministerrådet och respektive finansiär (regeringarna i Norden). I andra hand vänder sig rapporten till NDFs samarbetspartners (myndigheter för utvecklingssamarbete, utvecklingsfinansiärer och den privata sektorn).

Fyra huvudfrågor har styrt utvärderingen:

(i) Bedöma NDFs verksamhet utfrån dess mandat (bakåtblickande)

1. Har NDF levererat i enlighet med sitt mandat?

2. Vilket är NDFs mervärde idag ur ett internationellt perspektiv?

(ii) Bedöma NDF's potentiella roll i framtiden som gemensamt Nordiskt finansieringsinstrument (framåtblickande)

3. Vilka bör prioriteringarna vara för att stärka NDFs mervärde och komparativa fördelar inom ramen för internationell klimatfinansiering?

4. Bör NDF spela en annan eller bredare roll på uppdrag av de Nordiska regeringarna, antingen genom ett bredare mandat inom områdena klimatförändring och utveckling, eller inom andra områden som prioriteras av de Nordiska länderna?

Parallellt med den övergripande utvärderingen av NDF genomfördes också en utvärdering av Nordiska klimatfaciliteten (NCF).[1] Syftet var att förse NDF med en oberoende bedömning av NCF, där utvärderingsfrågorna inriktades mot två områden: 1) NCFs veksamhet, inklusive en challenge fond; och 2) NCFs relevans och mervärde inom NDF.

Det viktigaste beslutet för NDFs ägare är om fondens kapital ska fyllas på. Utan ytterligare finansiering kommer summan av tillgängligt kapital och återflödet från tidigare lån snart att understiga de årliga utbetalningsnivåerna. Fonden kommer i så fall att minska år för år, innan den helt töms ut. Utvärderingsteamet tillfrågades uttryckligen om ytterligare finansiering är motiverad.

Våra viktigaste slutsatser är att i) NDF har och har haft ett starkt och inflytelserikt samarbete med multilaterala utvecklingsbanker (MDBs), ii) fonden utvecklar en värdefull nisch genom att tillhandahålla flexibla finanslösningar till stöd för nya affärsmodeller, särskilt när det gäller anpassning till klimatförändringar; iii) NDF behöver ett starkare strategiskt fokus och en tydlig förändringsteori till stöd för detta, iv) det är tydligt att NDF är frånkopplat från de Nordiska ländernas övriga klimat- och utvecklingsarbete, och v) fondens arbete med uppföljning och utvärdering är väldigt svagt och behöver omgående förbättras.

Om punkterna iii) – v) omhändertas kan NDFs resultat och potential inom områdena i) och ii) enligt vår uppfattning motivera ytterligare kapitaltillskott. Det finns även goda argument för en utvidgad och mer ambitiös Nordisk institution för klimatförändringar och utveckling, och där NDF är en god kandidat för att fylla en sådan funktion. Förutom ytterligare finansiering behöver NDF en stark politisk uppbackning från sina ägare. Om detta kan byggas och upprätthållas, och de reformer som här föreslås genomföras, är möjligheterna goda för NDF att bli en hög-effektiv Nordisk institution.

[1] NCF är en 'challenge fund' som finansierar innovativa projekt i låginkomstländer inom klimatområdet. Fonden är avsedd att ta större risk än rent kommersiella aktörer.

Ett beslut om kapitalpåfyllnad av NCF behöver tas i slutet av 2019. Våra slutsatser och rekommendationer är att i) det finns lite stöd i forskning för att challenge-fonder i sig skulle vara överlägsna andra finansieringsformer, även om icke-akademiska översyner pekar på resultat i termer av ökad inblandning av privata sektorn, ii) NCF är organiserat på ett sätt som ligger väl i linje med vad forskning om challenge-fonder rekommenderar, iii) Mottagarna av NCF-finansiering är nöjda med samarbetet särskilt så på senare tid, iv) förändringar som nyligen genomförts för att förbättra investerares affärsmässiga fokus tycks rimliga och fungerande, v) för närvarande finns det begränsad information om resultaten av NCF-finansiering, men detta bör förbättras med ett nytt fokus på mätning av utfall; vi) trots förbättringar i uppföljning och utvärdering kan NCF göra mer i termer av att lyfta fram de mest konkreta resultaten av sin verksamhet; vii) detta bör göras i samverkan med NDF som del av en gemensam ansträngning att utveckla en gemensam förändringsteori; och viii) om det ska vara befogat för NDF att fortsatt hysa NCF så behöver faciliteten integreras betydligt bättre, och de som ”växer ur” NCFs finansieringsmöjligheter få tillgång till en specifik finansieringsmekanism inom NDF.

Enligt vår uppfattning så motiverar det NCF hittills uppnått, inklusive positiva förändringar nyligen, ytterligare finansiering, men enbart ifall NCF blir tydligare integrerat i NDF vad gäller såväl målsättningarsom verksamhet.

Bristen på utfallsdata har gjort det omöjligt att kvantitativt bedöma NDFs resultat. För att hantera detta användes i utvärderingen en design där flera metoder blandades: portföljanalys, utveckling av en förändringsteori, omfattande intervjuer och sex fallstudier på projektnivå. Även om bristen på utfallsdata omöjliggjorde en planerad studie av samhällelig avkastning på investeringar (Social Return on Investment, SROI), så genomfördes en illustrativ analys baserad på SROI i en av fallstudierna. En detaljerad översyn av möjligheterna att genomföra SROI-analyser presenterades, inklusive en diskussion om hur detta skulle kunna påverka utformningen av uppföjnings- och utvärderingssystem. NCF-utvärderingen omfattade också enkätundersökningar bland bidragsmottagare.

Viktiga resultat, slutsatser och rekommendationer

Innan vi redovisar detaljer kring utvärderingsfrågorna vill vi notera att NDF ä ren högt respekterad organisation. Personer som har arbetat inom NDF önskar ofta göra det igen. NDF står sig väl i jämförelse med andra organisationer vad gäller professionalism, flexibilitet, förmåga att agera snabbt och beslutsamt, öppenhet för nya idéer och vilja att förnya och förbättra. Många kommenterade att NDF som liten organisation, 'tävlar ovanför sin viktklass'.

UF1: Har NDF levererat i enlighet med sitt mandat?
Teamet har funnit följande med avseende på centrala delar av mandatet (1) NDF-projekt fokuserar på klimatförändringar och utveckling som mandatet stipulerar. (2) Mer än hälften av NDFs projekt genomförs i lägre medel-inkomstländer, trots att mandatet specificerar låg-inkomstländer; (3) NDF har, på styrelsens begäran, avsevärt ökat sitt Afrikafokus; (4) som följd av ytterligare styrning har NDF snabbt ökat sin användning av instrument som inte är gåvobaserade (se underavdelningen 5.1).

Även om NDF investerar i länder och områden med hög potential, och använder sig av instrument som kan förstärka resultat kan vi inte bekräfta detta, eftersom **NDF inte systematiskt samlar in data kring utfall**. Detta gör det omöjligt att på ett robust sätt bedöma vilket bidrag NDF ger till fattigdomsminskning, hållbarhet ur klimathänseende eller jämställdhet (sektion 5.1.3). Vi har dock samlat illustrativa exempel från intervjuer och fallstudier, vilka indikerar de resultat som NDF sannolikt genererar (detaljerade fallstudie-rapporter återfinns i Annex 11). Mer än en intervjuperson hävdar exempelvis att NDF är väldigt fokuserat på att stärka jämställdhetskomponenter i projekten. Men bristen på centralt insamlad jämställdhetsinformation gör det omöjligt att bedöma hur generellt detta jämställdhetsfokus är, eller om det har ökat över tid (sektion 5.1.6).

Det ska också noteras att, även om NDF betonar sin innovativa roll, så är inte allt man gör innovativt. Detta är inte nödvändigtvis negativt ur ett resultatperspektiv (se exempel på tekniskt bistånd för kapacitetsbyggande i sektion 5.2.5).

<u>Slutsatser</u>

På en övergripande nivå har NDF levt upp till sitt mandat när det gäller genomförda aktiviteter.

NDFs arbete med mätande av sin verksamhet är svagt vilket gör det omöjligt att bedöma effekter**.** Detta är problematiskt eftersom NDF gör anspråk på at vara en lärande organisation i en snabbt föränderlig kontext där innovation och lärande från misstag är centralt. En sådan miljö förutsätter att det finns ett system för att mäta effekter som är pålitligt och i ständig förbättring, och att detta system används dynamiskt för att ta fram underlag för strategi och beslut.

<u>Rekommendationer</u>

NDFs system för uppföljning och utvärdering (M&E) behöver avsevärt förstärkas och indikatorer för jämställdhet behöver läggas till. Vi rekommenderar NDF att överge mätningar baserat på enstaka händelser och utfall och istället investera i det som krävs för ett fungerande M&E-system. För att sätta detta i verket behöver NDF skaffa sig bättre intern M&E-kompetens (sektion 6.1.6).

UF2: Vilket är NDFs mervärde idag ur ett internationellt perspektiv?

Vi finner att **NDF ger mervärde** på följande sätt (se underavdelning 5.2):

- **Det ökade fokuset på klimatanpassning ger mervärde,** liksom NDFs ökande expertis kring främjande av affärsmodeller lämpade för privata sektorn inom klimatanpassning (sektion 5.2.2).
- **NDFs användning av en rad finansiella instrument ger mervärde, liksom tillhandahållandet av 'tålmodigt kapital'.** NDFs förmåga att erbjuda finansiellt stöd med olika inslag av gåvoandelar möjliggör dels tidigt stöd till riskfyllda satsningar (särskilt via NCF) och dels övergångar från gåvo- till kommersiell finansiering, och drar till sig investerare med lägre förväntningar på avkastning. NDF minskar också transaktionskostnader genom att utgöra en 'one-stop shop' för finansiering (sektion 5.1.4.).

- **NDF är mest framgångsrikt i att katalysera investeringar genom att utgöra finansiellt ankare i tidiga skeden** och genom att öppna för nya projekt genom sin projekt-förberedande fond (t ex i samarbete med MDBs) (sektion 5.2.3).
- **NDF kan ge betydande mervärde genom sitt inflytande över MDB:er,** men fallstudierna visar att detta inte alltid sker, särskilt inte när NDF förblir en relativt passiv partner (ex vis i förnybar energi- och hälso-projekt med Världsbanken i Uganda) (sektion 5.2.4).
- **Nya samarbeten med privat sektor har potential att ge stort mervärde,** men detta beror på NDFs förmåga att positivt påverka dessa aktörer och/eller främja nya relationer mellan dem och MDB:er (sektion 5.2.4)
- **NDFs kapacitetsbyggande arbete ger mervärde**, inte minst då den sortens verksamhet blir allt svårare att finansiera. Att använda gåvor i kombination med lån är viktigt, eftersom det bygger kapaciteten hos personal och andra intressenter, något som är centralt för framgång (sektion 5.2.5).
- **NDF ger mervärde genom att bidra till den samlade kunskapen om klimatfinansiering,** något som är särskilt värdefullt när den översätts till policy (sektion 5.2.5).

Ett potentiellt värde för NDF är dess nordiska identitet. Här finner vi att NDF inte är väl anknutet då kopplingar till bilaterala nordiska biståndsprogram och de organisationer som ansvarar för dem är svaga. NDFs verksamhet har inte någon särskild Nordisk karaktär. Begreppet 'Nordiskt intresse' tolkas väldigt olika av olika aktörer, men har dock potential att utgöra en värdefull tillgång för NDF, om omsorgsfullt tolkat och genomfört (sektion 5.2.6).

<u>Slutsatser</u>

Det finns en rad områden där NDF kan ge internationellt mervärde: genom sin målsättning, de instrument man använder, de partners man arbetar med, bidragen till kunskap och kapacitets-uppbyggande och genom att bidra med ett tydligt Nordiskt element till arbetet. Med undantag av det senare finner vi att NDF ger mervärde, men att upprätthållandet av detta står inför stora risker.

NDF utvecklar en värdefull nisch inom internationell klimatfinansiering. Fonden behöver stärkas i vissa avseenden, men har också visat en ovanlig förmåga att anpassa sig och utvecklas. Dess förmåga att agera snabbt och erbjuda finansiering med olika grad av förmåner anpassade för specifika projekt är värdefull. NDF fokuserar på avgörande frågor i länder där behoven är stora, och kombinerar innovativa ansatser – som att pröva nya affärsmodeller för klimatanpassning – med en påverkan som bygger på långsiktigt samarbete med MDBs.

NDFs Nordiska identitet är en komparativ fördel som inte utnyttjas. Ett antal inflytelserika aktörer argumenterade i intervjuer att NDFs Nordiska identitet ä ren tillgång i termer av a) kopplingar till Nordiska företag med värdefull teknologi, b) gemensamma värderingar mellan länder i termer av miljö och sociala frågor, och c) möjligheter att integrera den 'Nordiska modellen' för utveckling i aktiviteterna.

<u>Rekommendationer</u>

NDF bör förstå och hantera risker kring dess mervärde, och aktivt försöka utveckla sin nisch-roll, däribland som en verkligt Nordisk institution. Rekommendationer till stöd för detta fångas under de kommande två framåtsyftande utvärderingsfrågorna.

UF3: Vilka bör prioriteringarna vara för att stärka NDFs mervärde och komparativa fördelar inom ramen för internationell klimatfinansiering?

UF1 och UF2 har berört NDFs tidigare verksamhet, med avseende på hur man levererat i förhållande till sitt mandat och huruvida man skapat ett mervärde internationellt. Dessa slutsatser utgör centrala utgångspunkter för de framåtsyftande delarna av utvärderingen. Slutsatserna nedan är också baserade på intervjuer med partners och nyckelinformanter.

NDFs nuvarande värdeskapande utmanas på en rad olika områden:

- Att söka innovativa, privat-sektorbaserade affärsmodeller för att tackla klimatanpassning är centralt, men den typen av lösningar passar inte alltid. Risken är att knappa resurser slösas på denna typ av lösningar i situationer där de har små möjligheter att lyckas (sektion 5.2.25.2.3.).
- Att tillhandahålla finansiering med varierande grad av förmåner är värdefullt om man lyckas hitta rätt instrument till rätt projekt. Risken är att NDF ställs inför incitament att minska inslaget av förmåner oberoende av hur behoven i projekten ser ut (sektion 5.2.3).
- NDF kan agera katalytiskt genom att agera ankare för investeringar, men risken är att man går in i investeringar i senare skeden då den katalytiska effekten är mindre, eller tillhandahåller uppföljningsfinansiering till investerare som sannolikt kunnat få finansiering från annat håll (sektion 5.2.3).
- NDF kan ge mervärde genom att uppmuntra partners att ge sig in på nya områden eller genom att påverka deras befintliga verksamhet. Detta gäller såväl långsiktiga MDB-partners som nyare partners, inklusive aktörer i den privata sektorn. Risken är att NDF följer snarare än att leda. Att vara 'flexibel' är inte alltid av godo (sektion 5.2.4).
- Vissa saker som NDF gör, exempelvis kapacitetsbyggande, är 'tråkigt', men viktigt. Att enbart fokusera på det innovativa hotar dessa verksamheter och det värde de genererar (sektion 5.2.5).
- Även om NDF mycket väl kan 'tävla ovanför sin viktklass' framstår den nuvarande arbetsbördan som ohållbar. En nyckelresurs hos NDF är de anställdas kompetens, och en allvarlig risk är arbetstrycket och den höga efterfrågan på deras tjänster gör det omöjligt att behålla personalen (sektion 5.2.3).

NDFs framtida värdeskapande kan ökas om en mer fokuserad, strategisk och evidens-grundad ansats tas, och om följande punkter hanteras.

- NDF har inte använt någon uttalad förändringsteori-ansats, även om dess arbete bygger på en implicit förändringsteori.

(se 4.1). Detta begränsar styrning och fokusering av NDFs aktiviteter, inklusive den roll som NCF skulle kunna spela.

- Vilken förmånsgrad? som ska tillämpas i finansieringen av olika projekt hanteras inte på något systematiskt sätt av NDF. Fonden bör kartlägga var störst effekt kan nås i termer av behov i förhållande till NDFs komparativa fördelar. NDF bör sedan sträva efter att upprätthålla den graden av gåvo-andel i sin utlåning.
- NDF har en fast grupp av fokus-länder, vilket kan göra det svårt att samarbeta med MDBs kring vissa projekt. Detta förhindrar också flexibilitet när länders behov förändras.
- NDF är inte välkänt utanför kretsen av dess direkta nätverk och partners. Detta beror delvis på en etablerad strategi av att huvudsakligen arbeta med multilaterala utvecklingsbanker, MDBs, bakom stängda dörrar. Även om detta är värdefullt kunde NDF öka sin effektivitet på vissa områden genom att utveckla nya partnerskap. Bristen på fysisk närvaro i länder gör NDF beroende av andra som har denna närvaro, och i bedömningen av potentiella partners bör detta, i högre utsträckning, tas i beaktande.
- NDFs låga synlighet är också relaterat till dess kapacitet. Personalen har inte samma tid som personal i andra organisationer har att företräda NDF internationellt.

NDFs Nordiska identitet kan utnyttjas bättre för att skapa ökat mervärde internationellt. Detta utvecklas som svar på den fjärde och sista utvärderingsfrågan, vilken uttryckligt berör den nordiska dimensionen av NDFs framtida strategi (sektion 0).

<u>Rekommendationer</u>

NDF bör hantera risker för att organisationens mervärde ska minska genom att:

- Genomföra eller beställa forskning kring de aspekter av klimatanpassning som bäst lämpar sig för privat sektor-lösningar. Syftet är att vidareutveckla en specifik nisch inom detta fält och sedan sprida kunskaper och slutsatser till den bredare kretsen av aktörer kring klimatanpassning.

- Identifiera och upprätthålla den andel av gåvomedel som man önskar upprätthålla över hela projektportföljen, med en miniminivå för den gåvomedelsandel som ska gälla i finansieringen. Givet bristen på gåvomedels-finansiering internationellt rekommenderar vi att NDF upprätthåller en nivå av minst 50 procent gåvomedel för hela portföljen. Det finns även argument för att denna nivå skulle kunna vara 75 procent. (sektion 6.1.4).
- Säkerställa att investeringar med syftet att katalysera ytterligare finansiering är genuina föregångare och att alternativa finansieringskällor inte finns tillgängliga (sektion 5.2.3).
- Agera proaktivt med partners för att identifiera relevanta områden, initiera projekt och bygga partnerskap (t ex med MDB och privata aktörer) (sektion 5.2.4. och 0.).
- Inte alltid överge 'tråkiga' aktiviteter till förmån för innovationer (se nedan och 0.).
- Se till att det finns tillräckligt med personal för att förhindra arbetsöverlastning.

NDF bör öka sitt mervärde genom att:

- Bygga upp en strategi utifrån ett mindre antal insatstyper, vilka drar nytta av NDFs komparativa fördelar, analys av behoven och av möjliga resultat (sektion 0).
- Utveckla en förändringsteori som kan förverkliga denna strategi och där NCF är en integrerad del. Vi ger rekommendationer om hur denna förändringsteori skulle kunna utformas (sektion 0).
- Etablera ett särskilt lånefönster för uppföljningsfinansiering för NCF (och andra inkubatorer) (sektion 6.1.4).
- Fortsätta samarbetet med MDBer och aktörer i private sektorn, men se till att detta samarbete inte sker passivt utan skapar mervärde (sektion 6.1.5.).
- Undersök möjligheter att samarbeta med nya aktörer, såsom aktörer som ägnar sig åt 'katalytisk finansiering', liksom klimatrelaterade organisationer som Gröna Klimatfonden (sektion 0).

UF4: Bör NDF spela en annan eller bredare roll på uppdrag av de Nordiska regeringarna, antingen genom ett bredare mandat inom områdena klimatförändring och utveckling, eller inom andra områden som prioriteras av de Nordiska länderna?

Även om NDF bör agera mer strategiskt i termer av att utnyttja sina komparativa fördelar och i att uppnå resultat har utvärderingen tydligt visat att NDF behöver bli mer integrerat i de nordiska ländernas klimat- och utvecklingsarbete.

Förslaget om att utveckla en strategisk förändringsteori erbjuder möjligheter att främja båda dessa målsättningar. En kommentar som förekommit fler än en gång under intervjuerna är att ”NDF bör spendera mindre tid i Washington och Manila och mer tid i de nordiska huvudstäderna”.

För att försäkra sig om att NDFs strategi utgår från ägarnas prioriteringar krävs en noggrant formulerad process för att bygga upp det politiska stöd som är nödvändigt för att säkra fondens framtid. Detta är, ur utvärderarnas perspektiv, centralt och mer detaljer återfinns i den fullständiga utvärderingsrapporten.

<u>Slutsatser</u>

Utan kapitalpåfyllnad kommer NDF att försvinna. NDF är en högt värderad organisation som framgångsrikt ”tävlar ovanför sin viktklass”, bidrar till att uppfylla målsättningar kring klimatförändring och utveckling, och stärker de nordiska ländernas rykte. Under förutsättning att organisationen tar till sig rekommendationerna i denna rapport har den förutsättningar att göra betydligt mer, men enbart ifall NDF får den politiska uppbackning den behöver, vilken den i våra ögon – givet sin historia och starka potential – förtjänar.

<u>Alternativ och rekommendationer kring finansieringen av NDF</u>

Om NDF tar till sig dessa rekommendationer föreslår vi ytterligare finansiering. Det finns flera möjligheter att gå till väga. Ett första sätt genom vilket NDF kan bli finansiellt hållbart är att helt eller i stor utsträckning överge gåvofinansiering. NDF beräknar att finansiell hållbarhet vore möjligt att uppnå vid 80 procent lån- och 20 procent gåvoandel. Det är dock inte möjligt att göra detta och samtidigt upprätthålla nuvarande flexibilitet vad gäller gåvoandelarna. Denna flexibilitet utgör en stor del av NDFs mervärde, och vi rekommenderar således inte detta alternativ. För det andra skulle NDF kunna låna för att finansiera sin verksamhet. Men kravet på att återbetala lån skulle även det begränsa flexibiliteten, eftersom NDF då enbart skulle kunna stödja projekt som genererar avkastning som överstiger lånekostnaden. För det tredje skulle NDF kunna investera andras tillgångar genom förvaltade fonder. Detta skulle begränsa den operativa flexibiliteten, och samtidigt begränsa ägarnas möjligheter att driva sina egna prioriteringar genom NDF.

Enligt vårt synsätt är nyckeln till NDFs nuvarande och framtida mervärde dess förmåga att tillhandahålla olika fömånsnivåer. För att säkerställa detta rekommenderar vi att ett minimum på 50 procent av de årliga utbetalningarna utgörs av gåvo-ekvivalenter. Den kommande omgången av kapitalpåfyllnad av NDF bör vara förenlig med detta krav.

En miniminivå, som skulle möjliggöra för NDF att fortsätta som hittills, vore att nå upp till senaste nivån av påfyllningar. Det finns dock utrymme för större ambitioner. Givet omfattningen på behoven, och potentialen för organisationen att bidra till att fylla dessa med 'nordiska lösningar', kan större bidrag motiveras. Med utgångspunkt i NDFs behov av att genomföra reformer, och utifrån risken för en alltför snabb expansion rekommenderar vi en kapitalpåfyllnad som möjliggör för NDF att utvidga sina årliga investeringar från 50 till 75 miljoner Euro. Om gåvoandelen sätts till 75 procet av portföljen skulle detta kräva en påfyllnad om 400 miljoner Euro, något som minskar till 375 miljoner Euro om gåvoandelen sätts till 50 procent.

En sådan påfyllnad skulle ge finansiell hållbarhet till år 2031, då ytterligare en påfyllnadsrunda skulle krävas. En tioårig påfyllnadscykel skulle göra det möjligt för NDFs ledning, styrelse och ägare att ompröva och förnya strategin i ljuset av förändrade prioriteringar och en förändrad omvärld. Vilka följder en rak kapitalpåfyllnad respektive en påfyllnad finansierad med mjuka lån skulle ge diskuteras i huvudrapporten. Slutligen bör det noteras att NDFs huvudsakliga styrka är dess flexibilitet och snabbhet. Detta behöver bevaras. Varje expansion bör därför fokusera på att stärka kapaciteten att driva programverksamhet och undvika ökad byråkrati.

Summary

This report is the result of a request from the Nordic Development Fund's (NDF) Board of Directors to the Evaluation Departments at the Nordic Development Cooperation Agencies for an independent input to strategic decisions on the future direction of NDF. The study had two aims. First, to assess the performance of NDF in accordance with its mandate (its past performance). Second, to assess NDF's potential future role as a joint Nordic financing instrument for development (its potential future role).

The main audiences for this report are the NDF's Board and senior management, the Nordic Council of Ministers, and the respective financing parties (i.e. the Nordic governments). Secondary target groups are NDF's cooperating partners (e.g. development cooperation agencies, DFIs, the private sector).

Four main questions guided the evaluation:

(i) Assessing the performance of the NDF in line with its mandate (backward-looking)
1. Has the NDF delivered on its mandate?

2. What is the current value added of the NDF in an international perspective?

(ii) Assessing the NDF's potential future role as a joint Nordic financing instrument (forward-looking)
3. What should the key priorities be to further strengthen NDF's added value and comparative advantage in the international climate financing architecture?

4. Should the NDF play a different or wider role on behalf of the Nordic administrations, either through a broader climate change and development mandate or in other areas prioritised by the Nordic countries?

In parallel to the main NDF evaluation, an evaluation of the Nordic Climate Facility (NCF) was undertaken. The objective was to provide NDF with an independent assessment of NCF, with evaluation questions focusing on two dimensions: 1) NCF's

performance, including as a challenge fund; and 2) NCF's relevance and added value within NDF.

The key decision facing the NDF's owners is whether to replenish its capital. Without additional financing, available capital and income from historical loans will soon fall below annual disbursement levels. It will then diminish year on year, before eventually disappearing altogether. The evaluation team was explicitly asked for a view on whether further financing is justified.

Our core findings are that: i) NDF has a strong and influential record of partnership with the Multilateral Development Banks (MDBs), ii) it is developing a valuable niche in the provision of flexible financing to support innovation and new business models, particularly with respect to adaptation, iii) it needs a stronger strategic focus and a clear theory of change to support this, iv) it is quite disconnected from related climate and development activities of the Nordic countries, and v) its approach to monitoring and evaluation (M&E) is very weak and needs to be urgently improved.

If points iii-v are addressed, the NDF's track record, and potential, in areas i and ii justify additional financing in our view. There is also a good case for an expanded, more ambitious, pan-Nordic institution on climate change and development, with the NDF being a good candidate to do this. As well as being the considered view of the study team, this was also expressed by a number of senior interviewees, from both Nordic and partner institutions. As well as financing, the NDF needs strong political backing from its owners. If this can be built and maintained, and the reforms proposed here implemented, the potential for NDF as a high-impact Nordic institution is strong.

A decision must also be taken on a capital replenishment for NCF in late 2019. Our findings and recommendations are that: i) there is limited empirical evidence from the literature that challenge funds are intrinsically superior to other ways of disbursing finance, but non-academic reviews suggest effectiveness for outcomes like private sector involvement; ii) the NCF is organised in line with what is considered best practice in the challenge fund literature; iii) recipients of funding are positive about NCF, particularly in more recent rounds; iv) reforms initiated in recent rounds to improve the commercial focus of investees are sensible and appear to be working; v) at present we have limited outcomes data on the impact of NCF funding, but this should begin to change with a new focus on outcomes measurement; vi) despite improvements in M&E, NCF could do more to focus its approach on the most material outcomes; vii) this should be done in conjunction with NDF as part of a combined effort to develop a shared theory of change; and viii) to justify NDF continuing to host NCF, the facility needs to become much more integrated, with NCF 'graduates' able to access a dedicated NDF funding window.

In our view, the NCF's record, including recent positive reforms, justifies additional financing, but only if NCF becomes properly integrated with NDF, in terms of both objectives and operations.

The lack of outcomes data made it impossible to quantitatively assess the NDF's impacts. To address this, a mixed-method approach was taken to the evaluation, which combined portfolio analysis, theory of change development, extensive interviews, and six project case-studies. While the lack of outcomes data prevented the planned Social Return on Investment (SROI) studies, an illustrative analyis informed by SROI was conducted for one case. A detailed review of the potential for SROI-type approaches presented, including how this could inform M&E system design. The NCF evaluation also used surveys of recepients of funding.

Key findings, conclusions and recommendations

Before addressing the details of the evaluation questions, we would like to note that NDF is a highly respected organization. Those that have worked with NDF often want to do so again. NDF compares well with other organisations in its professionalism, flexibility, ability to move quickly and decisively, openness to new ideas and willingness to innovate. Many commented that for such a small organization, NDF 'punches above its weight'.

EQ1: Has NDF delivered on its mandate?
The team has found the following with regards to the **key elements of its mandate** (1) NDF projects focus on climate change and development as mandated. (2) More than half of NDF's projects are in lower-middle income countries, though the mandate specifies low-income countries; (3) NDF significantly increased its focus on Africa following Board guidance; (4) following further guidance to diversify its financing instruments, NDF has increased its use of non-grants rapidly (see sub-chapter 5.1).

While NDF is investing in countries and areas with high potential impact, and targeting financing instruments that could enhance impacts, we cannot verify this as **NDF does not systematically collect data on outcomes**. This makes it impossible to robustly assess NDF's contribution to poverty reduction, climate resilience, and gender quality (section 5.1.3).

We have, however, obtained illustrative findings from interviews and case-studies, which indicate the outcomes NDF is likely to be generating (detailed case study reports can be found in Annex 11[2]). More than one MDB interviewee, for example, claimed that NDF was very focused on enhancing the gender component of projects, and some case studies support this. Not all cases found a strong gender component, however, and the lack of centrally collected gender data makes it impossible to assess how generalised the gender focus is, or whether it has increased over time (section 5.1.6.).

It should also be noted that, while NDF stresses its innovative role, not everything it does is innovative, and this is not necessarily

[2] Please find the study's appendices (no 1-15) in a separate online pdf file 2019:06 Joint Nordic Organisational Assessment of the Nordic Development Fund (NDF) Annex 1-15 at www.eba.se (Annex 1: Terms of References of the Joint NDF Evaluation; Annex 2: Terms of References of the NCF Evaluation; Annex 3: NDF Portfolio; Annex 4: Evaluation Matrix; Annex 5: Consistency with OECD-DAC principles for evaluation of development assistance; Annex 6: Stakeholder mapping; Annex 7: Case study selection; Annex 8: Brief explanation of SROI; Annex 9: Comments on data quality; Annex 10: List of people interviewed; Annex 11: Case study reports; Annex 12: Interview schedules for internal/external interviews and case study interviews; Annex 13: Methodology for the evaluation of the Nordic Climate Facility (NCF); Annex 14: ToC NCF; Annex 15: Detailed survey data NCF)

negative from an impact perspective (see example of TA for capacity building section 5.2.5).

<u>Conclusions</u>

NDF has overall delivered on its mandate in terms of its activities.

NDF's approach to measurement is weak, making it impossible to assess impact**.** This is problematic as NDF aspires to be a learning organisation operating in a fast-changing space where innovation and trial and error are essential. Such an environment requires a robust and evolving approach to measuring impact, which is used dynamically to inform strategy and decision-making.

<u>Recommendations</u>

NDF's approach to monitoring and evaluation (M&E) needs to be strengthened significantly including the addition of gender indicators. We recommend a move away from anecdotal and output-oriented measurement and recommend NDF invests properly in what is required to have a system that is fit for purpose. To operationalise the proposed approach, NDF needs more internal M&E expertise (see section 0).

EQ2: What is NDF's added value in an international perspective?

We find **NDF is adding value** in the following ways (see sub-chapter 5.2):

- **The increasing focus on adaptation adds value,** as does its growing expertise in fostering private sector business models in the adaptation space (section 5.2.2).
- **NDF's use of a range of concessional financial instruments adds value, as does its supply of 'patient capital'.** In line with its mandate, all NDF's finance is considered to be concessional, but the level of concessionality deployed varies on a spectrum from grants to returnable capital with positive interest rates and different maturities. NDF's ability to deploy finance flexibly enables it to support risky, early-stage ventures (particularly

via NCF), helps projects transition from grants to commercial finance, and attracts investors through lower returns expectations. It also reduces transaction costs by being a 'one-stop shop' for financing (section 5.1.4.).

- **NDF is able to catalyse investment most successfully as an early-stage anchor investor** and through fostering a pipeline of projects through **project** preparation funds (e.g. with the MDBs) (section 5.2.3).
- **NDF can add significant value through its influence on the MDBs,** but case studies show this is not always the case, particularly where it is a relatively passive partner (e.g. renewable energy and health project in Uganda with WB) (section 5.2.4).
- **New private sector partnerships have the potential to be strongly value-additional**, but this is dependent on NDF's ability to positively influence these **actors**, and/or foster new relationships between them and the MDBs (section 5.2.4)
- **NDF's work on capacity building adds value**, not least as these types of activities are becoming increasingly difficult to fund. The use of grants in combination with reimbursable capital is very useful, as it enables the capacity of project staff or the capacity of other stakeholders that are key to project success (section 5.2.5).
- **NDF adds value by contributing to the sum of knowledge on climate finance,** which is particularly valuable when translated into policy (section 5.2.5).

An area of potential value for NDF is its Nordic identity. Here we find that NDF is not well connected, with weak links to Nordic bilateral programmes and the institutions which deliver these. **NDF does not have a particularly Nordic element to its activities**. The concept of 'Nordic interest' is understood very differently by different actors, but has the potential to be a powerful asset to NDF if defined and implemented carefully (section 5.2.6).

<u>Conclusions</u>

There are a number of ways that NDF could add value internationally: i.e. through its objectives; the instruments it uses; the partners with which it works; its contribution to knowledge and capacity building; and whether it brings a distinctive Nordic element to its work. With the exception of the latter, **we find NDF adds value, but maintaining this faces significant risks.**

NDF is developing a valuable niche in the international climate finance architecture. It needs to strengthen in some areas, but it has shown an unusual ability to adapt and evolve. Its ability to move quickly, and deploy finance with different levels of concessionality, tailored to particular projects, is valuable and unusual. NDF focuses on crucial issues in countries where needs are great and combines innovative approaches, such as testing new business models in adaptation, with influence derived from long-standing partnerships with the MDBs.

NDF's Nordic identity is a source of comparative advantage that is not currently being exploited. A number of influential actors argued in interviews that NDF's Nordic identify was a source of advantage in terms of a) links to Nordic firms with valuable technology, b) shared values amongst countries in terms of environmental and social issues, and c) the potential to integrate the 'Nordic model' of development into its activities.

<u>Recommendations</u>

NDF should understand and mitigate the risks to its value creation, and actively seek to develop its niche role, including as a Nordic institution. Recommendations to support this are covered under the next two, forward-looking evaluation questions.

EQ3: What should the key priorities be to strengthen NDF's added value and comparative advantage?

EQ1 and EQ2 assessed the past performance of NDF in terms of the delivery of its mandate and its value-added internationally. These findings are therefore a key input to the forward-looking aspect of the evaluation. The findings and conclusions below are also informed by interviews with partners and key informants.

NDF's current value generation is at risk in several areas:

- Seeking innovative, private-sector business models to address adaptation challenges is essential, but not all issues are amenable to these types of solutions. The risk is that scarce resources are wasted looking for solutions where they are unlikely to work rather than concentrating on those where they might (section 5.2.2, 5.2.3.).
- Providing financing with varying concessionality is valuable if it is correctly tailored to projects. The risk is that NDF faces incentives to reduce the degree of concessionality used, separately from project needs (section 5.2.3).
- NDF can catalyse investment by acting as an anchor investor, but the risk is that it invests at a later stage when catalytic effects are less clear, or providing follow-on financing to existing investees that would perhaps have obtained funding from elsewhere (section 5.2.3).
- NDF can add value through bringing partners to a new area, and/or influencing their existing activities. This is true of both its long-standing MDB partners, and newer partnerships, including with private partners. The risk is that NDF follows rather than leads, undermining this potential. Being 'flexible' is not always a good thing (section 5.2.4).
- Some things that NDF does, such as capacity building, are 'boring' but valuable. Focusing only on the innovative, threatens these activities and the value they generate (section 5.2.5).
- While NDF may well 'punch above its weight' the current workload appears to be unsustainable. A core strength of NDF is the quality of its staff, and a major risk is that the pressure of work they face, and high demand for their services, makes it impossible to retain them (section 5.2.3).

NDF's future value generation could be increased if a more focused, strategic and evidence-based approach was taken and the following points were addressed.

- NDF has not used an explicit ToC approach in the past, although it is underpinned by an implicit ToC (see 4.1). This has limits in terms of guiding and focusing NDF's activities, including the role that NCF could play.
- The degree of concessionality that NDF deploys across the portfolio is not approached systematically. It should identify where the greatest impact should be achieved in terms of gaps and NDF's comparative advantages and seek to maintain portfolio level concessionality at this level.
- NDF has a fixed group of focus countries, which can make it difficult for them to collaborate on certain projects according to MDB partners. This also prevents flexibility when country needs change.
- NDF is not well known outside its immediate networks and partners. This is partly due to a long-standing 'insider strategy', working largely with MDBs behind closed doors. While valuable, NDF could increase impact in some areas through developing new partnerships. Its lack of in-country presence makes NDF dependent on partners that have this, assessing potential partners should take this into account more systematically.
- NDF's low visibility also relates to capacity. Staff do not have the time to project NDF internationally as others do.

NDF's Nordic identity could be leveraged to increase its value-added internationally. This is developed in response to the final evaluation question EQ4 that explicitly addresses the Nordic aspect of NDF future strategy (section 0).

<u>**Recommendations**</u>

NDF should mitigate the risks to its current value creation by:

- Undertaking, or commissioning, research into the aspects of adaptation that are most suited to new private-sector solutions, focusing on developing a niche in these areas, and disseminating findings to the wider adaptation community (section 0).

- Identifying and maintaining the level of concessionality they wish to maintain across the portfolio, with a minimum level of grant-equivalent financing. Given the scarcity of concessional finance internationally, we recommend NDF maintains a minimum of 50% of grants across its portfolio, and there is a case for 75% (section 0).
- Ensuring investments to catalyse financing are genuinely 'first-mover' and alternative funds are not available (section 5.2.3).
- Being proactive with partners in identifying areas, initiating projects and 'matchmaking' (e.g. MDBs/private) (section 5.2.4. and 0.).
- Do not always abandon 'boring' activities in favour of innovation (see below and 0.).
- Ensure staffing levels are sufficient to manage workload.

NDF should increase its value-added by:

- Developing a focused strategy around a small set of intervention types based on its comparative advantage and analysis of need and potential impact (section 0).
- Developing a ToC to deliver this strategy, including the role of NCF. We provide recommendations to inform this process of ToC development (section 0).
- Establish a dedicated lending window to provide follow-on funding for NCF (and other incubator-type facilities) (section 6.1.4).
- Continue partnerships with MDBs and the private sector, but ensure these are additional, not passive (section 6.1.5.).
- Explore the value of partnering with new actors such as those working on 'Catalytic Capital', as well as climate institutions such as the Green Climate Fund (section 0)..

EQ4: Should the NDF play a different or wider role on behalf of the Nordic administrations, either through a broader climate change and development mandate or in other areas prioritised by the Nordic countries?

While NDF should focus its activities more strategically in terms of potential impact and comparative advantage, a clear finding of the evaluation is that NDF needs to become more integrated into the climate and development activities of the Nordic countries.

The proposed process of strategic theory of change development offers an opportunity to further both of these goals. A comment made more than once in interviews is that 'NDF should spend less time in Washington and Manila, and more in the Nordic capitals.

As well as ensuring that NDF's strategy is founded on the priorities of its owners, a carefully designed process could also help to build the political backing needed to ensure NDF's future. This is essential in the view of the Evaluation Team, and more details are provided in the full evaluation report.

Conclusions

Without capital replenishment NDF will disappear. NDF is a highly valued organisation that successfully 'punches above its weight', contributes to climate change and development goals, and enhances the reputation of Nordic countries. Assuming it takes on board the recommendations in this report, it also has the potential to do far more, but only if it receives the political backing it needs, and which in our view its record, and strong potential, deserve.

Options and recommendations on NDF Funding

If NDF takes these recommendations on board, we would recommend a new tranche of funding. There are various ways this could be achieved. First, NDF could become financially sustainable by switching largely or entirely to non-grants. NDF estimates this would be possible with 80% non-grants and 20% grants. It would not be possible to do this, however, while maintaining the current flexibility with respect to concessionality. This is a large part of NDF's value added, and we therefore do not recommend this option. Second, NDF could borrow to fund its activities, but the need to service loans would also restrict flexibility, as NDF would only be able to support projects that generated returns greater than debt service costs. Third, NDF could invest the assets of others through trust funds. This would restrict its operational flexibility, including the ability of its owners to pursue their own priorities through NDF.

In our view, the key to NDF's current and future value-added is its ability to provide finance with varying levels of concessionality. To ensure this continues, we therefore recommend that a minimum of 50% of average annual disbursals are grant equivalent. NDF's new round of funding should be compatible with this.

The minimum requirement, which would allow NDF to continue as before, would be to match the last replenishment. There is scope for greater ambition, however. Considering the scale of needs, and the potential for an institution to help address this with 'Nordic solutions', there is a case for this. Given the need for NDF to implement reforms, and the risks of rapid expansion, we recommend funding to enable NDF to expand annual investments from EUR 50 to 75mn. If grants were set at 75% of the portfolio this would require financing of EUR 400 mn, falling to EUR 375 mn if grants were 50% of investments.

This would provide financial sustainability until 2031, at which point a further round of financing would be needed. A 10-year funding cycle would enable NDF's management, Board and owners to reassess and refresh the strategy in the light of changing priorities and a changing external environment. The implications of funding through straight capital replenishmnent or concessional loan are discussed in the body of the report. Finally, it should be noted that a core part of NDF's strength is its flexibility and speed. This needs to be retained. Any expansion should therefore focus on programme management capacity, not expanding bureaucracy.

1. Introduction

In 2018, the Expert Group for Aid Studies (EBA) – together with the Evaluation Departments at the Nordic Development Cooperation Agencies – commissioned an evaluation of the Nordic Development Fund (NDF). The initial impetus for the evaluation was a request from the NDF. In tandem with this, an evaluation of the Nordic Climate Facility (NCF) – a challenge fund administered and funded by NDF – was undertaken by the same team. The original Terms of References (ToR) for the evaluations can be found in Annex 1 and Annex 2. This is the final, combined report for both evaluations. It summarises the findings of the research activities that have been carried out to date and makes a series of recommendations on the future direction for both NDF and NCF.

The report is presented over six chapters. Chapter 2 provides an overview of NDF, including its mandate, institutional set-up and evolution since 2009, and an initial discussion of the portfolio. An overview of NCF is also included. Chapter 3 introduces the evaluation aims, scope and provides a detailed discussion of methodology. Chapter 4 presents NDF's Theory of Change and stakeholder map. Chapter 5 presents findings on past performance, while Chapter 6 presents recommendations for the future in light of these findings.

2. About NDF

2.1. NDF's institutional set up

The table below summarises NDF's institutional arrangements. The Board of Directors makes financing decisions[3], while the Control Committee ensures that operations are conducted in accordance with the Statutes[4]. NDF's management and staff are responsible for the conduct of day-to-day operations.[5]

Table 1 NDF institutional set up and distribution of main responsibilities

Part of NDF	Responsibilities
Board of Directors	The Board of Directors makes policy decisions in matters that involve operations and administration. The Board also approves investments proposed by the Managing Director and is responsible for financial statements. Where appropriate, it may delegate its powers to the Managing Director. Each member country appoints one member and one alternate to the Board for a five-year term. The members elect a Chairperson and Deputy Chairperson for a term of one year. The chair and the deputy chair rotate among the member countries. The Nordic Investment Bank (NIB) also appoints an observer to the Board of Directors. The Chief Counsel of NDF serves as Secretary to the Board.
Control Committee	The Control Committee ensures that NDF's operations are conducted in accordance with the Statutes. The Control Committee is responsible for the audit of the Fund and annually delivers an auditor's report to the Nordic Council of Ministers. The members of the Control

[3] Financing decision up to EUR 500,000 under the Booster Facility (previously Small Grants Facility) can be approved by the Managing Director.

[4] NDF (2011) Agreement and Statutes. Available at http://www.ndf.fi/sites/ndf.fi/files/attach/ndf_agreement_statutes.pdf

[5] NDF Website: Organisation. Available at https://www.ndf.fi/organization

	Committee and Chairperson are appointed by the Nordic Council. The Nordic Council of Ministers is the principal forum for Nordic governmental cooperation. Denmark, Finland, Iceland, Norway and Sweden and the autonomous territories—the Faroe Islands, Greenland and Åland—are represented in the Nordic Council of Ministers. The Nordic Council is the official inter-parliamentary body in the Nordic Region with elected members from the five Nordic countries as well as from the three autonomous territories.
Management and staff	According to NDF's webpage, twenty people are employed by the organisation; eight men and twelve women. Within this, three employees are part of NCF: one manager and two project officers. NDF management includes a Managing Director and two Vice Presidents.

Source: Particip analysis based on NDF key reference documents

2.2. About NDF and its governance and development

NDF is an international financing institution established in 1988 by the governments of Denmark, Finland, Iceland, Norway and Sweden, as part of Nordic countries' co-operation on development assistance. The total subscribed and paid-in capital is approximately EUR 1 bn provided from the countries' development cooperation budgets. The capital has been subscribed and paid as follows : Sweden 37%, Denmark 23%, Norway 21%, Finland 19%, and Iceland 1%.[6] NDF's active portfolio under the climate mandate is currently valued at over EUR 300mn.

NDF is governed by its constituent documents, namely the Agreement between Denmark, Finland, Iceland, Norway and Sweden concerning the Nordic Development Fund of 9 November 1998 and the pertaining Statutes, as well as the Host Country Agreement between the Government of Finland and the Nordic

[6] Figures taken from NDF annual report, and sum to 101%. Presumably because of rounding.

Development Fund of 15 October 2013. In addition to the constituent documents, NDF's activities are governed by a number of other key reference documents (policies, strategies and guidelines) adopted by the Board of Directors or the Managing Director. These include[7]:

- Cooperation Agreements with MDB's;
- Strategies;
- Operational Policies and Guidelines;
- Institutional Policies and Guidelines;
- Disbursement Instructions.

For the first 25 years of its operations, NDF provided long-term concessional loans to support a range of development interventions. In 2009, NDF was given a more focused mission to *"provide financing and knowledge for climate change and development activities primarily in low-income countries, in line with the Nordic countries' priorities in the area"*. According to the new mission, NDF should provide financing to projects addressing climate change and contributing to development objectives, in mostly low-income countries, approach these issues in an integrated way, and be prepared to absorb high risks[8].

For instruments, NDF was to deploy grant financing in pursuit of these objectives. The change reflected a perceived lack of grant financing in the international climate change architecture, and sought to complement existing institutions, particularly the Multilateral Development Banks (MDBs). MDBs, as the name suggests, are primarily development-focused entities. The hope and expectation were that NDF's ability to provide grant financing focused on climate change issues would encourage them to lend more in these areas, and to increase the climate-relevance of their existing activities.

The introduction of the climate mandate meant that future financing would have to support projects that have a significant and positive

[7] See NDF's website, Legal framework, policies and guidelines, available at https://www.ndf.fi/legal-framework-policies-and-guidelines

8 NDF (2017) NDF Environmental & Social Policy and Guidelines

climate change impacts, whether adaptation, mitigation or a combination of the two.

Box 1 Adaptation and Mitigation efforts in line with the climate mandate

Adaptation efforts cover a wide range of activities that enhance the ability of partner countries to respond to climate change-related issues such as sea level rise; storm floods, and drought; and threats to water resources, health, infrastructure, and agriculture. Adaptation measures may include climate change impact analysis and national adaptation planning as well as "climate proofing" of sectors, geographic areas and specific projects. Mitigation efforts are targeted at reducing greenhouse gas (GHG) emissions by measures such as improved energy efficiency, increased use of renewable energy sources, sustainable transport initiatives, and carbon sequestration.

Source: Particip based on NDF (2016) Guidelines for Project Identification and Screening, and NDF (2016) Agile and innovative. NDF looking ahead – NDF Strategy[9]

NDF's adopted a new strategy in November 2015, a key component of which was a shift from a pure focus on grants towards increased provision of 'reimbursable capital' (i.e. loan loans, equities, and blended instruments). The strategy document also defines the core principles and strategic areas which should guide NDF's activities, as follows:

- **Climate change and development** - NDF's activities should be aligned with, and supportive of, poverty reduction, the principles of development effectiveness and the Sustainable Development Goals (SDG). The Annual Report of 2017 also recognises the alignment of NDF operations with the SDGs, particularly those related to climate action (SDG 13), poverty (SDG 1) and gender equality (SDG 5). Furthermore, the report highlights NDF's commitment to realising the Paris Climate

[9] NDF (2016) Agile and innovative. NDF looking ahead – NDF Strategy. Available at: https://www.ndf.fi/sites/ndf.fi/files/attach/ndf_strategy2016_lowres_1.pdf

Agreement, such as through its management of the new Energy and Environment Partnership (EEP) Trust Fund. [10]

- **Nordic Identity** – NDF's activities reflect the priorities of the Nordic countries in the area of climate change and development policy, indicating a strong focus on poverty reduction, development effectiveness, inclusive development and a proactive approach on gender responsiveness.

According to NDF, these principles are operationalised in ways that draw upon certain comparative advantages:

- Nordic know-how – Nordic countries have internationally competitive expertise and technologies for climate solutions and NDF is well-placed to support these;
- Innovative frontrunning - approaching sustainable development, poverty reduction and climate change in an integrated way, coupled with the ability to absorb high risk, enables NDF to act as an innovative frontrunner;
- Agility and flexibility – according to NDF, its ability to supply a mix of financing instruments distinguishes it from other investors;
- Reaching across regions - through its presence in Africa, Asia and Latin America, NDF can help replicate well-functioning development and climate change-related concepts over the regions.

In its 2016 strategy, NDF states that it will focus on the following seven strategic areas:

1. Catalytical role and leverage;
2. Project preparatory funding;
3. Supporting innovation;
4. Supporting private sector development and linkages between the public and the private sector;

[10] Annual Report (2017) https://www.ndf.fi/sites/ndf.fi/files/news_attach/ndf_annual_report_2017_small.pdf and Annual Report (2018) https://www.ndf.fi/sites/default/files/news_attach/annual_report_2018_1604_final.pdf

5. Piloting interventions with a high-risk level;
6. Identification of emerging climate change issues;
7. Providing a mix of financing instruments.

Twenty years after the creation of NDF, the **Nordic Climate Facility** (NCF) was established. The NCF is a Challenge Fund to finance early stage climate change projects in developing countries with a focus on small, early-stage, innovative projects that can be scaled up or replicated. Grant financing is allocated on a competitive basis and open to Nordic businesses and civil society groups with partners in developing countries. Its establishment in September 2009 was linked to NDF's revised mandate from earlier that year. Since then, NCF has organised 8 calls for proposals. The first four calls were administered by The Nordic Environment Finance Corporation (NEFCO). In June 2015, NDF informed NEFCO of its decision to take over the administration of NCF and would thus manage the 5th call onwards. There were several reasons given for this: blurred accountability between NEFCO and NDF, competing ideas on management, missed learning opportunities within NDF.

Following a process evaluation of NCF in 2017, a number of reforms were introduced. The evaluation proposed ways to improve the NCF application and selection process, which were implemented. In addition, NCF changed its approach to place greater emphasis on two key outcomes: (i) leverage, scale up or replication of projects after they close; and (ii) the involvement of the private sector to promote innovation and private sector development.

Financing from NCF is based on annual thematic calls for proposals and a competitive selection of project proposals. NCF can provide grants ranging from EUR 250,000 to 500,000. NCF does not cover the entire project costs and as such co-financing is required.[11] Specifically, project partners must mobilise at least 25% of the requested NCF grant. Of this amount, Nordic partners are

[11] NCF, Concept note application guidelines 9th call for proposals (May 2019) https://www.nordicclimatefacility.com/documents/NCF-9-Concept-Note-Application-Guidelines.pdf

obliged to provide a minimum of 10% as loan or equity, and local partners a minimum of 5% as loan, equity and/or grant.

NCF applies a two-stages application process. Based on a concept note, NCF selects the highest scoring eligible applicants. NCF provides templates for both the concept note and full proposal and provides detailed comments on these to further the chances of successful project implementation.

For those that progress to Stage 2, the applicants are invited to submit a full proposal. Highest scoring proposals are then invited for an interview. These covers: due diligence: sustainability, feasibility, capacity of partners and risk assessment. Applications are also screened to assess the likelihood of long-term viability, replicability and the potential for scaling up.

The criteria against which the full proposal is evaluated and scored is developed for each call. They cover the main areas of 1/ business concept relevance, viability and feasibility, 2/ climate change relevance, 3/ development impact, 4/ project implementation and feasibility.

2.3. NDF's co-financing partners, project identification and screening

NDF provides co-financing in cooperation with multilateral and bilateral development institutions. Multilateral Development Banks (MDBs) include the World Bank, the Asian Development Bank, the Inter-American Development Bank, the African Development Bank, while bilateral partners include the Nordic countries' development assistance agencies, and donor country development finance institutions (DFIs). As a co-financing institution, NDF flexibly uses grants, loans and equity, or a combination of these financial instruments.

To receive NDF investment, countries need to be eligible for support from IDA (less than USD 1,165 per capita income in

2016)[12] and have previously received NDF support. Other low-income and lower middle-income countries may also be eligible on a case by case basis.

Projects are identified by governments in partner countries according to national priorities, or through partnerships with the MDBs, Nordic bilateral development organisations and other financing institutions. NDF also obtains project information and ideas from Nordic companies, organisations and networks.

The NDF-financed component of co-financed projects must be in line with its mandate and eligibility criteria.[13] In this regard, the Guidelines for Project Identification and Screening give criteria for assessing potential projects' economic justification, climate change relevance and other developmental aspects.

The core screening criteria for **adaptation** are:

- Projects should satisfy standard economic and social tests (or be expected to if not easily quantified) at the national level, i.e. excluding global impacts;
- Projects should be primarily climate related, i.e. at least 50% of total investment costs should relate to measures which help adapt and build resilience to the current or expected impacts of climate change.

The core screening criteria for **mitigation** are:

- As with adaptation, projects should satisfy standard economic and social tests;
- Projects should have a significant climate component, i.e. the global benefits of the direct GHG emission reduction or carbon sequestration should be at least 10% of project investment costs.

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[12] World Bank (n.d.) IBRD/IDA and Blend Countries: Per Capita Incomes, Lending Eligibility, and Repayment Terms. Available at https://policies.worldbank.org/sites/ppf3/PPFAnnex/993431d6-2d14-406e-a923-69984923e494Annex2.pdf

[13] NDF Website: Projects. Available at http://www.ndf.fi/projects

The Guidelines go on to describe that "*while providing support for economically justified climate change projects is the core objective of NDF, the two conditions are in practice minimum requirements (…). In practice, many considerations are taken into account in determining whether or not to support a given activity. Relevant aspects are wide-ranging and include technical, economic, social, political, and administrative issues.*" (p. 8).

In addition, NDF uses 'strategic criteria', namely the six selected strategic areas set out in NDF's strategy, as well as the following project level aspects[14]:

- Alignment with relevant Sustainable Development Goals with particular attention on goals related to gender equality and poverty reduction;
- Consistency with national development plans, including climate action plans and strategies for climate resilient green/low-carbon growth;
- Relation to other relevant development projects/activities (multilateral/bilateral/national)
- Evidence of ownership/commitment by co-financing partner/ national executing agency (e.g. by financial contribution);
- Institutional capacity to manage/implement the project, including administrative structures, human resources, financial sustainability, general absorptive capacity, etc.;
- Support for Nordic development policy priorities, including support for sectors or activities in which Nordic companies or institutions have particular expertise;
- Alignment with NDF's operational policies and guidelines as well as relevant safeguard policies of NDF's financing partners including impact analyses made by these institutions.

[14] The criteria are explicitly mentioned in the guidelines. However, the guidelines do not provide indication on how much weight should be given to them.

3. Evaluation aims, methodology and limitations

This chapter introduces the evaluation questions, aims, scope and overall approach and goes on to describe the methodology and each evaluation activity in detail. It also discusses the limitations of the evaluation.

3.1. Evaluation aims and questions

There are two main aims to the evaluation:

1. To assess the performance of NDF in accordance with its mandate.
2. To assess NDF's potential future role as a joint Nordic financing instrument for development.

Table 2 provides an overview of the evaluation questions and sub-questions.

Table 2 Overview of evaluation questions and sub-questions

Evaluation question	Sub-questions
Q1. Has the NDF delivered on its mandate?	1.1 Has NDF's steering facilitated the delivery of its mandate?
	1.2 To what extent have NDF's financing instruments and approach helped address poverty reduction and climate change challenges in an integrated way, coupling this with an ability to absorb high risks and promote innovation and private sector development?
	1.3 Have NDF's contributions been rooted in partners' priorities, especially priorities of NDF's Nordic owners?
	1.4 To what extent has NDF contributed to outcomes related to poverty reduction and the development of low-carbon societies more resilient

	to climate change, while promoting gender equality?
Q2. What is the current value added of NDF in an international perspective?	2.1 Are the NDF's contributions additional/ complementary to those of co-financing partners and other actors (e.g. the MDBs and climate funds)? Specifically, do they play a niche role as a flexible funder? 2.2. Do NDF investments have a catalytic effect on other funders i.e. what evidence is there that they leverage other funds? 2.3. What are NDF experiences of working with the private sector, how do these compare with traditional investors and how should this relationship evolve? 2.4. Does NDF create a "Nordic value added"[15] and how clear is the 'Nordic value added' to the partners and Nordic stakeholders? 2.5. What is the contribution of NDF to the international climate architecture?
Q3. What should the key priorities be to strengthen NDF's added value and comparative advantage in the international climate financing architecture?	3.1. Assuming there is evidence that outcomes are being achieved, do the current results motivate new replenishments?
Q4. Should the NDF play a different or wider role on behalf of the Nordic administrations, either through a broader climate change and development mandate or in other areas prioritised by the Nordic countries?	3.2. What are the strategic options for the NDF? In particular, what is the optimum range of financing instruments that NDF should use in the future?

The analysis was guided by an **evaluation matrix** which sets out indicators and methods associated with each question. This matrix is presented in Annex 4.

[15] As defined in section 2 of the NDF Strategy (2016).

The overall objective of the NCF evaluation was to provide NDF with an independent assessment of NCF as a facility. The evaluation of NCF had two connected aims:

1. To assess the performance of NCF in accordance with the objectives and outputs stated in the most recent NDF Board approval document of NCF 7-9, including assessment of the effectiveness and efficiency of the management of NCF.
2. To assess NCF's relevance and value-added as a challenge fund to NDF, and provide concrete recommendations for potential future directions and development of NCF, including but not limited to i) assessing the alternative of setting-up up NCF as a trust fund; ii) assessing the use of other types of financing than grants.

Linkages between NDF and NCF evaluations

As this inception report was being prepared for the NDF evaluation, NDF announced the decision to commission a separate evaluation of the Nordic Climate Facility (NCF). The timing was driven by NDF's internal processes, particularly the fact that a decision was due on whether NDF should replenish NCF's funding. As set out in the original ToR to the evaluation of NDF (Annex 1), NCF was always part of the scope. However, the timing of the NDF evaluation, and the proposed evaluation of NCF were identical, and the research team was concerned that two separate evaluations of the same entity would be completed at the same time. There was a risk that two evaluations might have led to separate, "out-of-context" findings/conclusions/recommendations with limited usefulness.

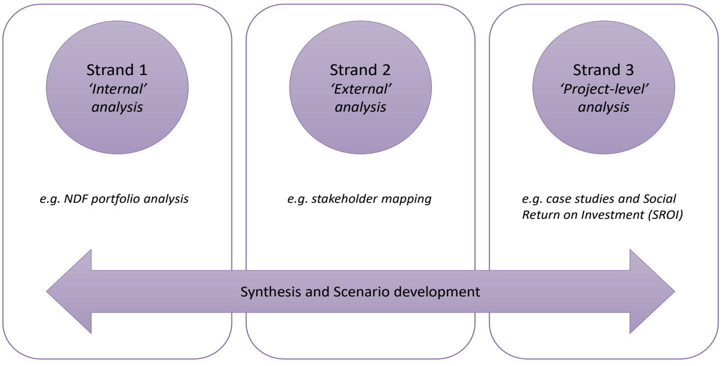
Therefore, the team proposed that the two evaluations be merged and discussed this solution with both EBA and NDF. Given the significant overlap between the questions motivating the evaluations, and the potential for synergies through the course of the evaluation process, the team's proposal was accepted. The NCF evaluation overlaps strongly with the main NDF evaluation, but also has a distinct purpose – i.e. to assess the effectiveness of NCF as a Challenge Fund and the role of Challenge Funds in NDF more generally. The NCF study was funded by NDF, creating a potential conflict of interest. In practice this was not an issue. NDF was keen to obtain a balanced, impartial, and independent view on the strengths and weaknesses of NCF, and its long-term relationship with NDF. This aligned fully with the approach to the NDF evaluation, where an assessment of this type was always envisaged.

In discussion with EBA, the Board and NDF it was later decided that the evaluation team would not prepare a NCF standalone report, but rather integrate the NCF specific findings into the NDF report to enable an assessment of NCF within its wider context as a facility of NDF.

3.2. Evaluation scope and overall approach

The scope of the evaluation covers investments under the new mandate from 2009. It also considers the financing of NDF, the priorities of the Nordic countries, and the evolution of the international climate architecture in assessing options for its future role. To address the questions above, the evaluation was organised around three strands as illustrated in Figure 1 and described below.

Figure 1 Evaluation Strands



Source: Partcip's own chart

- **Strand 1 (Internal):** We use the term 'internal' because data were drawn from NDF internal interviews and NDF's data and documents. This part of the evaluation assessed the extent to which NDF has followed its mandate, examined its governance and funding arrangements, and identified its priorities going forward. Activities undertaken include a Theory of Change (ToC) workshop, the development of a ToC for NDF, the generation of interview schedules, stakeholder mapping and interviews. We also analysed NDF's portfolio data and documents to provide background and context and inform case-study selection.

- **Strand 2 (External):** This strand assessed external perceptions of NDF's strengths and weaknesses, and how it could achieve greater impact in the future in the light of the evolving climate finance architecture. This primarily involved stakeholder mapping and interviews with NDF's partners and climate finance experts.
- **Strand 3 (Project-level):** We conducted six case studies from across NDF projects selected on a predefined set of criteria. The case studies were designed to assess whether and how NDF has added value and provide project-level evidence on where and how value is being created (detailed case study reports can be found in Annex 11).

The evaluation adhered to the principles and standards of development evaluation agreed upon by the OECD-DAC and the European Union (EU) – see Annex 5 for a more detailed overview of the consistency with OECD-DAC principles for evaluation of development assistance.

The NCF evaluation was scoped to focus on calls 7-9. Additionally, the team has carried out surveys with calls 5-6 to strengthen and contextualise findings. NCF evaluation questions covered two main dimensions. 1) NCF's performance at outcome level, including NCF's performance as a challenge fund and 2) NCF's relevance and added value within NDF (i.e. the extent to which it is contributing to organisational objectives and the complementarity or otherwise of the two entities). Detailed Evaluation Questions can be found in Annex 13.

3.3. Methodology

This section provides more detail on each evaluation activity and how they were approached. These activities are as follows:

- Theory of change and stakeholder mapping
- Document/data review
- Interviews
- Case studies

A separate methodology was developed for NCF. This is set out in Annex 13.

3.3.1. Theory of change and stakeholder mapping

A theory of change (ToC) and stakeholder map were developed in the inception phase. The purpose was to identify a) assumptions that would underpin the data collection materials and b) participants to involve in the evaluation. A ToC workshop was held at NDF offices to gather information for both exercises. Various iterations were then produced until the final version was signed off as part of the inception report, including related assumptions and interviewee lists.

3.3.2. Document data/review

There are two types of documents that were reviewed: i) institutional and project-level. The latter were mainly consulted for the case studies, although certain documents like the closing reports were reviewed more widely for background information on the level and type of data collected. In this section, we focus on the institutional documents and discuss project-level documents below as part of the case study methodology.

Table 3 below sets out the institutional-level documents that were reviewed as part of the evaluation. In addition, related documents from the NDF website were reviewed as appropriate.

Table 3 NDF-level documentation

Document type	Document details
Annual reports	These are available for every year since 2009
Evaluation documents	Results summary report (2016/2017) NDF case study (2015) NDF and IDB (2014) Evaluation of NDF co-financed projects NDF climate change portfolio data in June 2016 NDF climate change portfolio data in May 2015 NCF results report (2017) Sectoral evaluations (mineral, forestry, mining, solar energy)
Strategy	NDF strategy adopted in 2015 (2016) NDF Business Plan (produced annually)
Operational policies and guidelines	Results based management framework Guidelines for project identification and screening General procurement guidelines Anticorruption guidelines Environmental and social policy Position paper on biofuels Position paper on energy subsidy Tax policy
Constituent documents	NDF Agreement and Statutes
Institutional policies and guidelines	Rules of Procedures of the Board of Directors Code of Conduct for the Board of Directors and the Managing Director NDF Staff Code of Conduct Arbitration rules for settlement of employment-related disputes

3.3.3. Interviews

In Chapter 4 we set out a framework for stakeholder mapping: core, connected and external stakeholders. This has been used to inform the groups that were selected for interview. Three types of interviews took place:

1. Internal interviews with core stakeholders.
2. External interviews with connected and external stakeholders.
3. Project-level interviews for case studies.

Interviews had several functions with respect to the three evaluation strands. For Strand 1 (internal) they provided insights on:

1. Future priorities and the extent to which these are consistent with the mandate/strategic priorities;
2. Perceptions of how well strategic priorities are being met;
3. How well the mandate is being implemented and where improvements could be made;
4. The funding model and the effectiveness of the range of instruments;
5. How additionality is understood;
6. The Results Management Framework, strengths and weaknesses and how it could be improved.

Externally, interviews focused on whether NDF has filled a particular niche (as it claims to), and how it should operate in the future, given its strengths/limitations and the gaps in the climate finance architecture.

Project-level interviews were incorporated into the case studies and are discussed in more detail below.

In selecting interviewees, we were guided by the principle of materiality i.e. those stakeholders that have influence over NDF and/or who are important for achieving impact. A scoring process was used to identify the most material stakeholder groups (i.e. those with a minimum score of 3) and organisations were selected from within those groups. Table 4 sets out the number of interviews conducted for the different aspects of the evaluation.

Table 4 Number of interviews conducted per aspects of the evaluation

Evaluation aspect	Number of interviews
Strand 1 (Internal)	17
Strand 2 (external)	12
NCF (staff and projects)	13
Case studies	25
Total	**67**

Interviews followed a semi-structured interview design, which allowed participants to focus on their areas of expertise or interest (see Annex 12 for each interview schedule). In some instances, we introduced quantitative questions (e.g. to phrase questions around a rating scale) in order to summarise some findings succinctly and compare answers between stakeholder groups. In the external interviews we also drew on the findings of the climate mapping to inform the schedule. Interviews were written up in question and answer format and then synthesised to address relevant research questions.

3.3.4. Case study selection

The purpose of the case studies was to understand whether and how NDF has added value through its activities. The case studies provide project-level evidence and beneficiary perspectives to enhance the more general findings gathered elsewhere.

A 'case-oriented approach' where a case, or selection of cases are analysed is a common approach to evaluation, especially where variable-oriented research using aggregated datasets is neither possible nor desirable. There is insufficient data available for NDF projects to conduct variable-oriented evaluation (see the section on main limitations 0). However, even if systematic data had been gathered, this would have been difficult to interpret because:

1. Only a small number of climate projects have closed, and these are not representative

2. NDF is in most cases a co-financer, and assessing additionality is therefore challenging
3. Data are unlikely to be comprehensive enough to address all the causal links and assumptions underpinning the ToC and major gaps would be inevitable.

However, we also make a positive case for using the case study approach. These are as follows:

1. Whilst variable-oriented research may identify patterns in the data, it will not explain those patterns i.e. why particular activities are transformed into short, medium and long-term outcomes
2. A small, well-chosen selection of cases are suitable where there is already a good understanding of parts of the causal chain in the ToC (e.g. clean energy produces fewer carbon emissions). What is unknown is whether the way that NDF operates as a funder (e.g. flexibility of finance) adds value to this process. This is best reported on qualitatively through a combination of interviews and case studies.
3. An important part of the evaluation is about the future strategy. Whilst it may not be possible to ascertain whether NDF always plays a niche role in every investment, examples from case studies where this has happened demonstrate the feasibility of a strategy and its potential value.

Case studies were selected via the following steps:

Step 1: Clustering

Projects were clustered according to financial instruments, each of which has its rationale – i.e. an implicit theory of additionality. NDF's shift from grants is perhaps the key element of the current strategy. It is also one of the most significant questions facing the evaluation and was emphasised by the reference group as an important issue for the evaluation (for a detailed description of the role of the reference group, please refer to Annex 1). This links directly to the ToC: NDF assumes that different instruments are suited to achieving different objectives and that their ability to choose the most appropriate instrument(s) and flexibly combine them is their unique contribution. To begin to assess this, we first organised projects according to financial instrument: grants (with challenge funds as a subset); and non-grants (equities, loans, blended).

Step 2: Application of selection criteria

Projects were then filtered according to criteria, depending on whether they were grants or non-grants.

Criteria for non-grants

Whilst most NDF projects are pure grants, this is changing rapidly. While no non-grant projects have been completed, it is important that they be included in the case studies due to their importance to NDF's strategy. In our clustering, there are 10/185[16] projects in the non-grants category, and we selected two case studies from this cluster: one pure loan/equity and one mix of grant and loan/equity. A second criteria is that one of the case studies should involve a MDB (given their importance as strategic partners historically), while the other case should be a private actor.

Criteria for grants

From the grants cluster we selected four case studies. Given their weight in NDF's portfolio, we selected one project for each MDB, which account for 91.9% of projects in the grants cluster. As one MDB was selected in the non-grant category above, we were able to cover all four MDBs in the final case study choice.

Once these filters were applied, we chose the case studies, giving consideration to the remaining relevant criteria, and taking account of the selections made in the non-grant cluster:

- Data availability;
- Geography;
- Size (by value);
- Importance of NDF in project (% share of total funding)
- Stage of implementation;
- Objectives/SDG;

[16] NDF and NCF projects

- Strategic objectives, e.g. gender.

While it is not possible to be representative in a small number of case studies, we have sought to reflect the main features of NDF's activities as fully as possible. A short-list of projects was shared with the RG and NDF to get inputs on the final decision.

3.3.5. Case study methodology

The case studies proceeded via the following five sequential steps:

Step 1: Preparatory work to develop outcomes map. This included:

- Desk research on the topic/area
- Initial interviews with NDF project officer, investee and partner

Step 2: Document/data review. For each closed project, NDF holds the following documents:

- Board final consideration
- Progress reports
- Closing reports
- Completion checklists
- Rating reports

NDF securely provided the evaluation team with these documents for each of the projects (where available). In addition, reports/data held by partners or investees themselves were consulted. In some cases, evaluations were also available.

Step 3: Data collection of primary and secondary data. This included:

- Development of an interview schedule that draws on the outcomes mapping and secondary literature.
- Interviews with beneficiaries and co-financers including representatives of businesses, country governments or other investees to obtain their perceptions of the types and level of value created.
- Analysis of any existing data/reports held by the project

Step 4: Social Return on Investment. At the design phase, the intention was to conduct simplified SROI analyses for each case study (see Box 2). As the evaluation proceeded, it became clear that this would only be possible in some cases. SROI is a data-intensive methodology, with the key requirement being data on outcomes for key stakeholders and additionality. Three of the case-studies – for various reasons – could not generate these forms of data, so our approach has been adjusted accordingly. For the other three, appropriate data was potentially available but the team experienced significant difficulties in retrieving it. Therefore, we consider our analysis rather an economic assessment as the present data limitations prevented it from sufficiently complying with the standard SROI methodology.

Step 5: Write up. The case studies were written up following a specified format.

Box 2   About Social Return on Investment (SROI)

SROI is a framework for understanding, measuring and managing the outcomes of project, organisation or policy. It is particularly useful where many stakeholder groups are affected, or where an organisation has impacts across a 'triple bottom line' i.e. social, economic and/or environmental impacts. It was developed from social accounting and cost benefit analysis, and has a lot in common with other outcomes-based approaches, such as ToC/Contribution Analysis. SROI is distinct from these methodologies in the following ways:

- It includes benefits to all relevant stakeholder groups, not just those that accrue to the State, or 'the economy'.
- It places a monetary value on all outcomes – including non-traded outcomes – so that they can be compared with the investment made. This results in a ratio of total benefits (a sum of the value of all the outcomes) to total investments. For example, an organisation might have a ratio of EUR 4 of social value created for every EUR 1 spent on its activities. The ratio aims therefore for a holistic representation of value.
- It is principles-based. This approach aims to ensure that all SROIs follow a prescribed methodology and to drive up the quality and reliability of SROI analyses. See Appendix 1 for a list of the SROI principles.
- It is a participative methodology. Stakeholders are engaged at key stages of the analysis to ensure that the appraisal is 'measuring what matters'. Our intended workshops are one way of doing this but skype/phone interviews with stakeholders on the ground are equally important.

While the ratio is important, SROI is about more than this. A good SROI combines qualitative, quantitative and participative methods of evaluation and presents narrative and financial information that tells a story of change. The information should also help focus on those activities that create the most social value. The approach also allows for some flexibility in how the methodology is applied.

Source: Particip's synthesis based on existing literature

3.3.6. Climate Finance review

The global climate finance architecture is a complex web of national and multilateral institutions, with a large number of institutions focused on different parts of the mitigation-adaptation spectrum. In terms of the quantity of actors, there is no 'gap'. Indeed, there is a strong argument for fewer institutions focused more intensively. For many years, the assumption was that the Green Climate Fund

(GCF) would help rationalize the sector, by concentrating donor resources in a single institution. While this may still happen, it is far from certain. It seems highly likely that the complex network we have today will exist in some form for the foreseeable future.

Given this, a core question facing this evaluation is where NDF can add the most value within this network. We addressed this question in three stages. To assess this, we reviewed the existing climate finance architecture, including the role of Nordic countries, and identified the main funding gaps.

These reviews were complemented by interviews with external and internal stakeholders, where questions were posed about the main gaps in the climate finance architecture, and where NDF could add the most value, including in partnership with other Nordic institutions.

3.4 Evaluation activities in the NCF evaluation

The NCF evaluation consisted of the following steps:

- Development of ToC and assumptions
- Internal interviews/workshops with NCF/NDF staff (n=7)
- Survey of NCF rounds 5-8 (n=45)
- Interviews with partners (n=6)
- Interviews conducted as part of NDF evaluation, that also touched on NCF (n= 29)

A full methodology and limitations of the evaluation are provided in Annex 13.

3.5 Main limitations

There are three main limitations to the NDF study, which relate to the overall design and scope of the evaluation, and to the quality of existing data that NDF holds. Table 5 details limitations and how we sought to overcome them.

Table 5 Limitations, implications and solutions

Limitation	Implications for the evaluation and suggested solutions
Lack of fieldwork	A key limitation is that fieldwork is not built into the research design. It was therefore not possible to meet beneficiaries directly and to assess investments in person. While we addressed this by seeking to engage beneficiaries (e.g. employees; recipients of services) remotely in case studies, the success of this strategy varied. Requests to interview beneficiaries were not always forthcoming, for example. We also encountered barriers in accessing participants for our case studies more generally. Where projects had closed, it was difficult to contact staff as many had moved on. There was also reluctance on the part of some personnel to be interviewed (e.g. the Government of Vietnam). As a result, the evaluation team had fewer interviews to draw upon in some case studies than was intended. Even where beneficiary interviews were possible, this was limited to certain kinds of direct beneficiaries like business owners or government representatives. It was generally not possible to engage end beneficiaries.
Data limitations	NDF holds very limited project-level data and is reliant on what partners and co-investors have generated, which is in turn often very output-oriented. The quality and quantity of data varied by project depending on the sophistication of data collection by partners. More detailed comments on the data quality (also in relation to the SROI exercise) are presented in Annex 9. To make a thorough assessment of impact, each project would require ex-ante and ex-post measurements from a representative sample of beneficiaries, as well as robust measures of additionality. This would not have been possible, even in principle. 83 projects from the current portfolio have been closed (NDF and NCF), and these are not a representative sample of NDF projects, as many are NCF projects with shorter timescales, or focus on early-stage capacity building. Even if outcomes were being systematically measured, there are insufficient closed projects to measure impacts in the aggregate. We responded to this by conducting a large number of interviews, held workshops with key informants, and conducted in-depth case studies. The interviews focused

Limitation	Implications for the evaluation and suggested solutions
	on the most important assumptions underpinning NDF's strategy (e.g. its historical and future niche role as a catalytic financier) – questions that are best addressed qualitatively. We provide detailed recommendations on how to address data limitations going forward in a sub-section of Chapter 6 on M&E related recommendations.
Time limitations	The time available for the evaluation was constrained. The evaluation began in late 2018, with the inception report approved in mid-March 2019. Preliminary findings were developed in just over two months with a further two months to complete the final report. This is a very short turnaround for a substantial evaluation.

Despite these limitations, the evaluation team has made every effort to answer the research questions as fully as possible. The project also benefited a formal quality assurance process. A first layer of Quality Assurance was provided by Tino Smail at Particip GmbH, who ensured that the key thematic and methodological elements and all products met the required quality standards. In particular, he reviewed and provided feedback on the inception report, the preliminary findings report, each case study and the final report. An important step of the QA process was to check that usefulness, consistency and coherence is ensured between findings and recommendations, and that findings are duly substantiated. In addition, a Reference Group (RG) provided feedback on all major deliverables to strengthen the quality of the report. The RG consisted of experts in the field of study and representatives from the Evaluation Departments of all Nordic countries.

4. Theory of Change and stakeholder analysis

In the inception phase, the team developed a ToC and stakeholder map. These were used to refine the evaluation matrix (see Annex 3), inform the mix of methods/tools to be used for data collection, and provide inputs to the content of the interview schedules.

4.1. Theory of Change

The development of the NDF ToC was informed by NDF document/portfolio reviews, interviews with staff as well as workshops with NDF and consultations with the Reference Group. A separate ToC was developed for NCF (see Annex 14). Both ToCs cover various levels of a causal chain:

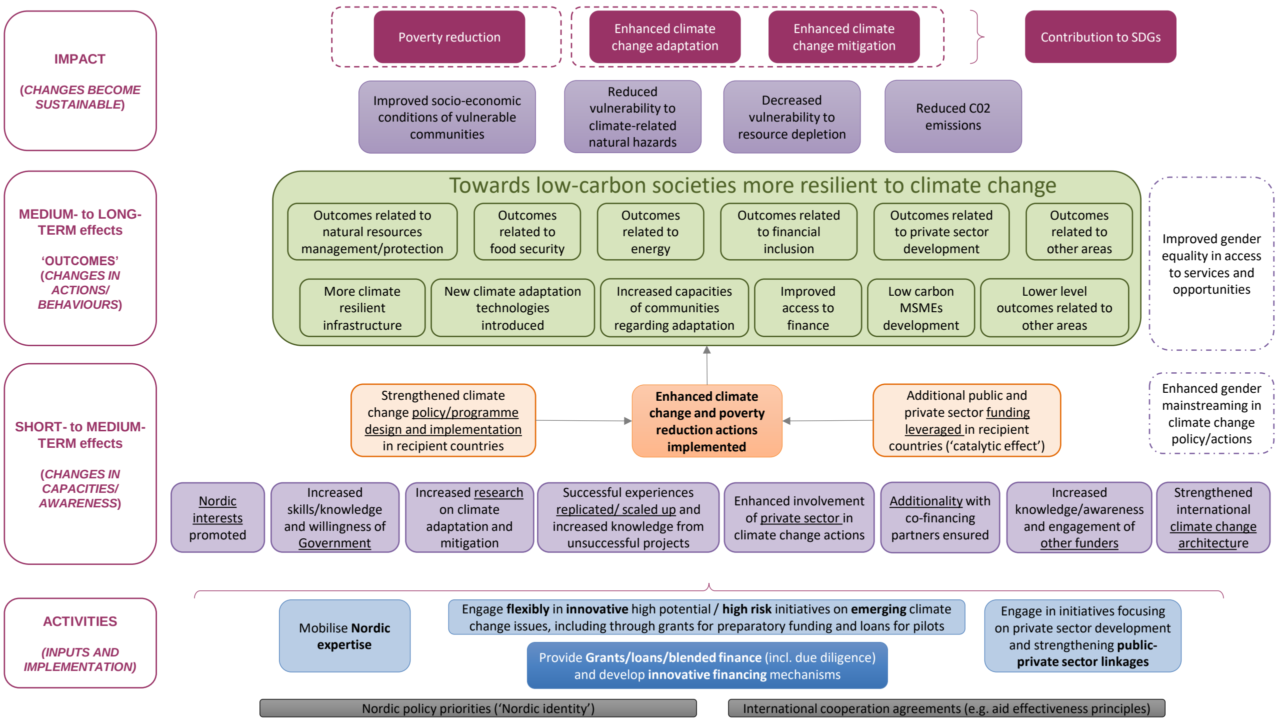
- **Activities (inputs and implementation)**: NDF's activities are centred around providing grants/loans/blended finance, which includes preparatory funding and loans for pilots and scaling up initiatives. Activities are assumed to be guided by Nordic policy priorities and international cooperation agreements and be consistent with mandate and strategy as described in the sub-section of Chapter 5 dealing with EQ 1.
- **Short-to medium-term effects**: These activities taken together lead to changes, including additional public and private sector funding ('catalytic effect'), enhanced technical capacities of government and successful co-financed projects which are replicated or scaled up. As a result, NDF is expected to contribute to enhancing the implementation of climate change and poverty reduction actions.
- **Medium- to long-term effects ('outcomes')**: as a result of the previous level, NDF is assumed to contribute towards low-carbon societies which are more resilient to climate change and poverty reduction related outcomes. Specific outcomes include more climate resilient infrastructure, improved energy efficiency and increased food security. It is also expected that NDF-

supported actions contribute to gender equality across all targeted outcome areas.

- **Impact**: as per its mandate, NDF is expected to contribute towards climate and development impacts, eventually resulting in enhanced climate change adaption, enhanced climate change mitigation, poverty reduction, and a broader contribution towards the Sustainable Development Goals.

It is important to note that the ToC presented here has been developed for the purposes of this evaluation. While NDF did not use a ToC approach prior to this evaluation, like all change organisations its work has been underpinned by an implicit ToC. What is presented in Figure 2 is therefore the evaluation team's understanding of this implicit ToC, which has been tested as part of this evaluation. The development and use of an explicit ToC form a key part of our recommendations in Chapter 6.

Figure 2 NDF's Theory of Change



As summarised in Table 6, several assumptions underpin the first three levels of the ToC. Assumptions on the links between long-term outcomes and impacts (e.g. whether investments in clean energy lead to reductions in carbon emissions) are not covered in this evaluation.

Table 6 Assumptions underpinning the Theory of Change

Levels in the ToC	Assumptions
Activities – Inputs	1. NDF chooses investments which best deliver its mandate, and which accurately reflect the (changing) priorities/values of the Nordic MFAs (e.g. gender, equality) 2. Different financing instruments are required to support different types of interventions successfully (e.g. grants for project preparation; concessional finance for piloting and proof of concept; commercial financing for scaling up and replication of business models) 3. NDF has the ability to use instruments at all points of this spectrum, and so tailors its financing to suit the needs of different types of intervention 4. Development Finance Institutions and MDBs generally provide equity and loans at commercial rates, particularly in middle-income countries which are not eligible for soft loans from MDBs, which makes NDF's ability unique among development actors working on similar issues. 5. NDF can therefore either a) provide the optimal mix of financing itself, or b) complement the funding of other development actors to deliver the optimal mix with its partners. 6. NDF is small and flexible enough to be able to react quickly to changing circumstances, and make investment decisions more rapidly than larger, more bureaucratic actors.
Activities - Implementation	1. NDF collaborates and works effectively with co-financers and in-country partners 2. The range of funding mechanisms available to NDF, and their ability to apply them sequentially/ flexibly makes them an attractive partner to MDBs and other more traditional funders 3. NDF's ability to blend financing instruments is well-judged and blending actually takes place

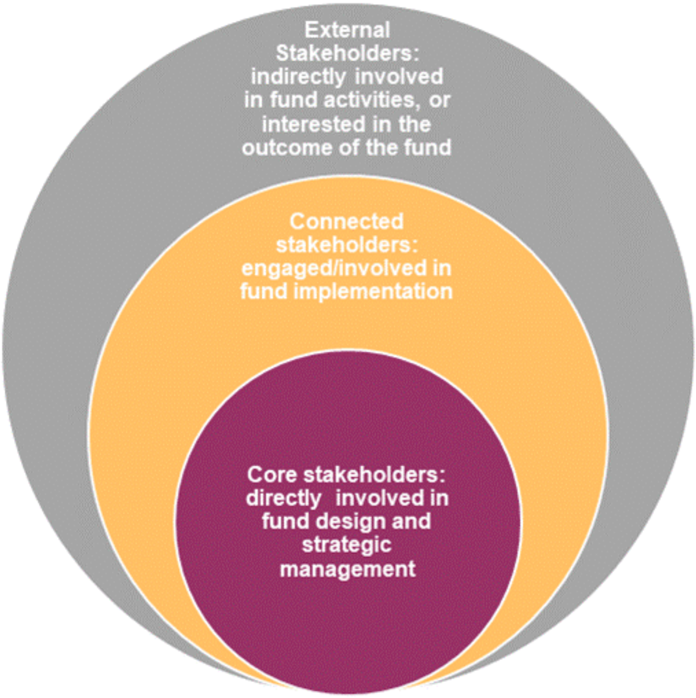
Levels in the ToC	Assumptions
	4. NDF oversees and manages the implementation of projects effectively 5. NDF has effective due diligence, Environmental, Social and Governance (ESG) monitoring and evaluation processes 6. NDF adds value to projects in terms of knowledge/advice/project management 7. NDF attracts higher quality applicants due to the Nordic brand 8. Nordic partners provide Nordic know how/capacity
Contribution to short- to medium-term effects	1. NDF preparatory project funding improves the likelihood that projects will go ahead and increases their chances of success 2. NDF invests in innovative projects, which identify and test new business models and technology for climate mitigation/adaptation and increases the sum of knowledge on ways to tackle mitigation/ adaptation 3. NDF supports riskier interventions than its competitors. Some fail, but this contributes to the sum of knowledge. Those that succeed help bring ideas to the mainstream within climate finance 4. NDF's involvement in projects leverages other funding and NDF plays a catalytic role in some/all investments in which it participates (i.e. those investments would not have happened at the same scale, speed, timeline, or at all without NDF involvement) 5. The capacity of developing country governments to adapt to and mitigate climate change is enhanced through NDF's support 6. NDF's support for private sector development and public/private sector linkages builds private and public sector capacity 7. As the result of the increased capacity of the stakeholders, the design/implementation/financing of climate change actions is enhanced 8. NDF investments lead to an increase in the number of private investors and private companies working on climate mitigation/adaptation 9. As a result of NDF's activities, business opportunities are created for Nordic companies, including uptake of technologies 10. NDF spreads Nordic values within developing countries

Levels in the ToC	Assumptions
	11. No external factor (e.g. political shifts at national level, unforeseen fundamental changes in co-financers strategies) creates obstacles that would hamper the achievement of the expected effects at short- to medium-term level.
Contribution to medium- to long-term effects (outcomes)	1. NDF investments lead to new project ideas/new sources of funding being targeted at adaptation, which is under-funded relative to mitigation 2. NDF investments are effective at tackling climate mitigation/adaptation, and have positive secondary benefits, especially with regard to poverty/inequality and gender 3. NDF investments bring technologies to market that can become economically viable, are scaled up and replicated, and attract increased and new investment flows 4. In the medium/long-term, there are economic benefits to Nordic countries and improved international reputation 5. No external factor (e.g. emerging conflicts, natural hazards) creates obstacles that would hamper the achievement of the expected effects at medium- to long-term level.

4.2. NDF stakeholders: Their role and links to NDF

Figure 3 illustrates the main stakeholder groups for NDF. Drawing on marketing literature, this distinguishes between external, connected and core stakeholders depending on how they engage with NDF. Annex 6 presents a list of NDF stakeholders according to these categories (excluding NCF stakeholders, which are considered separately as part of the NCF evaluation). In general, NDF and NCF share similar stakeholders, however, the categorisation, or materiality of some varies. NCF works with entities like universities that are not relevant to NDF. Perhaps most notably, NCF requires a Nordic partner on all projects, which NDF does not. This list was verified by NDF.

Figure 3 Overview of NDF's main stakeholders



Source: Authors own analysis based on Sida (2018) Evaluation of Sida's Global Challenge Funds

As discussed above, to arrive at a list of interviewees, we identified the most material using the scoring criteria set out in Table 7. The results of this process, i.e. a list of people interviewed, can be found in Annex 10.

Table 7 Scoring criteria for stakeholders

Score	Level of value/interest	Level of influence
4	Essential	Significant control
3	Necessary	Strong influence
2	Desirable	Moderate influence
1	Non-essential	Limited influence

The most material stakeholders are as follows:

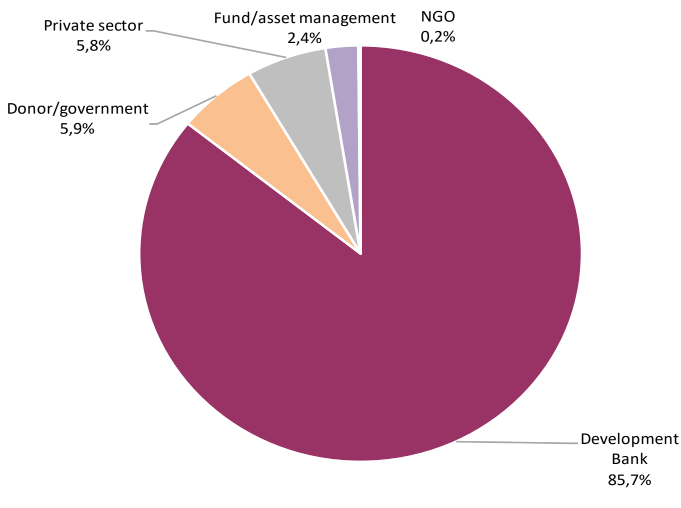
- The Board/national owners

- Co-financers
- Beneficiaries – national governments and end beneficiaries
- The environment.

The environment is the most intangible of these. We incorporated this in two ways. First, by being responsive to the scientific and economic literature on climate change. Second, in interview, people were asked to reflect on the importance of NDF's activities to the environment and future generations.

Figure 4 illustrates the 'weight' of NDF partners by organisational type (excluding NCF partners) using data on financial commitments. It shows that development banks have historically been the most important, 85.7% of NDF project financing between 2009 and 2018 went to projects that were implemented with Development Banks as partners. This is followed by donor/governments (5.9%), private sector partners (5.8%), Fund/asset management and NGOs (0.2%).

Figure 4 Partners by organisation type



Source: Author's own analysis based on data provided by NDF

The importance of the MDBs in the portfolio of NDF may be changing. One participant at the NDF ToC workshop told us that going forward NDF is "*not entirely convinced that development banks are best placed to support innovation*". New partners mentioned as potentially better placed were private funds or special purpose vehicles. Some NDF staff see MDBs as slow, hierarchical, and unwieldly. In contrast, fund managers in the private sector were described as "*totally different animals*". There are risks to this, however. NDF was set up to be lean and not duplicate functions, hence the complementarity with MDBs. NDF has no dedicated M&E staff and relies on partner evaluations or folds it in as a task with overall project management. To be sustainable this requires all partners to have significant M&E capacity, which may not always be the case with a more diverse set of partners.

5. Findings on past performance

This chapter focuses on past performance and describes the findings regarding EQ1 and EQ2. At the beginning of chapters 5.1 and 5.2, we provide key conclusions and recommendations regarding evaluation questions EQ1 and EQ2. These feed directly into EQ3 and EQ4, the forward-looking questions of this evaluation and are further elaborated on in chapters 0 and 0.

NDF's past performance has two main elements: i) whether NDF has been consistent with its mandate; and ii) whether it has had added value. This chapter is organized in line with the evaluation questions.

5.1. Has NDF delivered on its mandate? (EQ1)

Based on our analysis, the team has come to the following conclusions with regards the NDF's mandate:

- **NDF has largely delivered on its mandate** in terms of its activities.
- **NDF's approach to measurement is weak,** making it impossible to assess the impact elements of its mandate.

In section 0 we provide recommendations on how to implement a new measurement approach to ensure NDF can robustly assess the outcomes it is generating and use this to inform decision-making in the future. This should derive from, and be supported by, a more focused strategy, within the bounds of its current mandate (this will be further specified under EQ4 in chapter 6).

The following sub-chapters present more detailed findings with regards to this first evaluation question.

5.1.1. Overview of NDF's mandate

In 2009, NDF received a new mission to focus on climate change. Specifically, NDF was given the mission to: "*provide financing and knowledge for climate change and development activities primarily in low-income countries, in line with the Nordic countries' priorities in the area*." At this time, NDF was instructed to issue grant financing, with the principle mode of work being through cooperation with the multilateral development banks (MDBs).

Although the formal mandate has not changed since 2009, there have been instructions from the Board, which can be taken as reflecting Nordic country priorities. The three most important are: i) for NDF to ensure a minimum proportion of its investments are in Africa; ii) to diversify in terms of financial instruments and partners, and iii) to increase the importance of gender in its activities.

We find that**:** (1) NDF projects are focused on climate change and development as mandated. (2) NDF works in low- and lower middle-income countries. More than half of its projects are in the latter, though its mandate specifies low-income countries; (3) NDF significantly increased its focus on Africa following Board guidance to increase this weighting; following further guidance to diversify into reimbursable financing instruments (4) NDF has increased its use of non-grants significantly and rapidly

NDF does not collect data on outcomes systemetically, making it impossible to assess its impact in this regard. We have obtained some illustrative findings from interviews and case-studies, on the types of outcomes that NDF is likely to be generating.

5.1.2. Focus on climate change and development

NDF projects are focused on climate change and development as mandated.

NDF's project screening tool rates proposals on both climate and development criteria, with a requirement that successful projects score highly on both. When working on projects initiated by the MDBs – which are inherently developmental – NDF assesses the climate component of the project, and only proceeds where a threshold is reached.

It should be noted, however, particularly with adaptation, that the range of projects which potentially fall into this category is very wide. Furthermore, distinguishing between 'straight' development projects and adaptation projects is not always easy. While it is therefore positive that NDF uses clear processes to make this assessment, it remains the case that the loose definition of adaptation potentially creates problems in terms of project selection and focus. This is also taken up in the following sub-chapters on EQ 2 in relation to NDF's added value. In the rest of this section, we will address specific aspects of the mandate such as income, geography and gender.

5.1.3. Country income and geographic focus

NDF works in low- and lower middle-income countries. More than half of its projects are in the latter, though its mandate specifies low-income countries NDF also significantly increased its focus on Africa following Board guidance to increase this weighting.

Table 8 breaks down the projects in the portfolio by income group for those that are country-specific – i.e. excluding regional projects.

Table 8 Income breakdown

	NDF	NCF	Total
Projects	54	77	131
LIC	24	32	56
LMIC	30	35	65

Source: Author's own analysis based on data provided by NDF

All projects are in either low-income countries (LICs) or lower-middle income countries (LMICs), with more than half of projects being LMICs rather than LICs. This is true for the full portfolio, and for both NDF and NCF. While the mandate refers to 'low-income' countries, it should be noted that the LMIC countries in the portfolio have largely graduated from LIC status over the life of the mandate. That said, these figures do highlight a risk. As LICs become LMICs over time, the nature of NDF's portfolio will change accordingly.[17] There is value in building country expertise over time, but this will also shift NDF away from its LIC focus. At the same time, and particularly given NDF's focus on a wider range of financial instruments, there may be a temptation to focus on countries with more developed financial systems. Again, this may risk pulling NDF away from its LIC focus. There are easy ways to counter these risks if decisions were made to do so, which will be discussed in the recommendations section.

[17] The 2016 strategy commits NDF to working in 18 countries: Benin, Ethiopia, Ghana, Kenya, Mozambique, Rwanda, Senegal, Tanzania, Uganda, Zambia, Bangladesh, Cambodia, Laos, Nepal, Vietnam, Bolivia, Honduras and Nicaragua

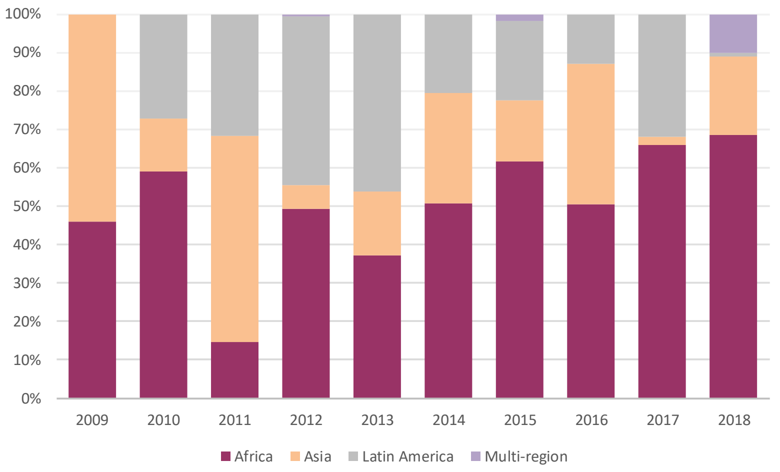
Table 9 Allocation to Africa and non-grant instruments, 2009-18

Year	% Africa	% non-grant instruments
2009	46.09	0.00
2010	59.12	0.00
2011	14.61	0.00
2012	49.30	0.00
2013	37.29	0.00
2014	50.77	0.00
2015	61.59	0.00
2016	50.44	48.50
2017	65.83	21.10
2018	68.63	59.70
2018 weight	*52.72*	*19.83*

Source: Author's own analysis based on data provided by NDF

Table 9 shows annual disbursals to Africa as a percentage of total investments, and the proportion of annual lending in the form of non-grants. The first of these has been on a rising trend from 2013, with more than half of all investments being in the region each year, and substantially more than this in the most recent years. In 2018, more than half of the portfolio by value is invested in Africa. Given the scale of the finance climate gap in Africa and the emphasis in the mandate on LICs, this is clearly consistent with that requirement (see Figure 5).

Figure 5 Share of value per geographical focus 2009-2018 (% of value in EUR)



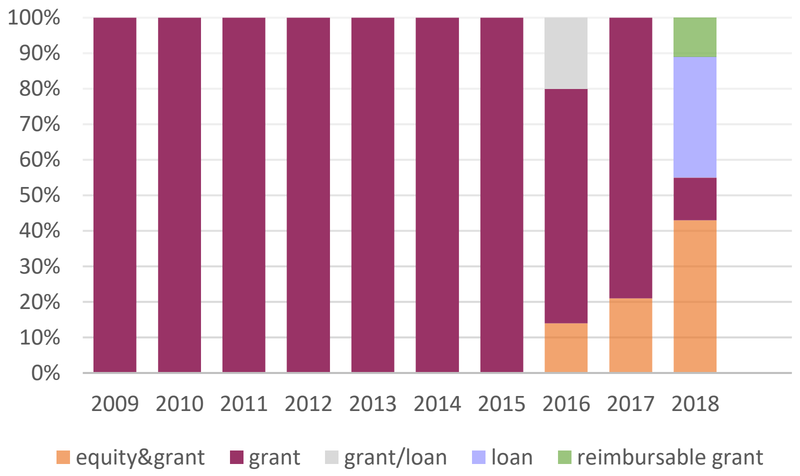
Source: Author's own analysis based on data provided by NDF

5.1.4. Financing instruments

NDF has diversified into reimbursable financing instruments and has increased its use of non-grants significantly and rapidly.

Figure 6 shows the evolution of the financing mechanisms in the NDF portfolio. Again, we see strong evidence of NDF's responsiveness to its mandate. In the 1990s NDF only offered loans. In 2009, this became 100% grants. The shift away from grants began in 2016 and the effect is striking. By 2018, a fifth of the portfolio was non-grant. Of this, 43% is combined equity/grant, 34% straight loan, and 11% reimbursable grant. In 70% of cases, therefore, a non-grant investment is accompanied with a grant component. This is usually some form of TA to enhance the commercial viability of the investment, either through project preparation or improving the business climate. However, there are differences in the use of financing instruments between regions: whereas NDF still exclusively focuses on grants in Latin America, instruments are more varied in other regions. Interestingly, equity has only been used in Africa to date.

Figure 6 Share of financing instruments 2009-2018 (share of value in EUR)



Source: Author's own chart based on data provided by NDF

NDF describes the focus on grants and then the diversification of instruments as a response to a *"rapidly evolving external context"*. In the 1990s and 2000s, they argue, climate resilient infrastructure was not seen as a priority in many countries, and there was little demand for loans to support such infrastructure investments. Grants were thus essential in this context. In recent years, developing country governments are seen by NDF as increasingly recognising the risks of climate change, which is reflected in the growth in demand for climate-related loans. A second external factor is that the economic classifications of some countries is changing. While LMICs that NDF supports must be IDA eligible, some are transitioning to borrowing on more commercial terms from the World Bank as their per capital incomes rise.[18] The transition from grant to non-grant financing is an important component of normalising countries' relations with public and private investors and increasing their financing options. NDF sees great value in its ability to provide a

[18] Kenya, for example, is classified as a 'blend country' in the IDA framework.

range of financing instruments – with varying degrees of concessionality – to support this process.

The shift in financing has also seen new private sector partnerships developed. In line with the demand for climate loans, there is more private sector interest in making these kinds of investments, and NDF feels it is well placed to facilitate this process. The intention for 2019 is that the value of loans will be slightly less than 2018, but broadly similar. Given the small number of investments NDF makes in any given year, the percentages can shift quite dramatically. Nonetheless, there is a clear strategy to have fewer grants and more loans/blended instruments in the portfolio.

There are also internal reasons for the diversification away from grants, however. Disbursing only grants while receiving no additional capital has progressively depleted NDF's financial resources and NDF is currently not economically sustainable as a result. While NDF receives reflows from pre-2009 loans, the annual value of these will start to decline within a few years. Part of the rationale for the shift to non-grants is thus to provide a future income stream for NDF.

5.1.5. Outcomes

While NDF is investing in countries and areas with high potential impact, and using targeted financing instruments with the potential to enhance impacts, we cannot verify this as NDF does not collect data on outcomes systematically.

As discussed in the presentation of main limitations (in section 0), NDF does not collect data on outcomes systematically across its projects, which has not allowed us to analyse an aggregated outcomes dataset. To address this in the evaluation, we have adopted a qualitative methodology that explores the evaluation questions and the likelihood that NDF is achieving impact and adding value from the perspective of those with experience of working with NDF.

A further research activity was to conduct case studies to explore impact at a more granular level, including the use of SROI to assess questions of value-added. However, as discussed in detail in the case studies and later in this evaluation, these were also hampered by a lack of outcomes data and relied in large part on interview findings. Table 10 describes the types of data collected by NDF's partners, or the results associated with these projects, for each case study. A note of caution here, whilst an initial glance may imply a wide range of large impacts, a deeper analysis exposes real weaknesses in the data. This means that in most instances, they are not fit for incorporation into an economic analysis, especially a data-intensive methodology like SROI.

Table 10 Results reported on by case studies

Project	Reported outcomes/targets/indicators
rAREH (C99) in Africa (regional)	The following targets are set for 2023: • 610,000 MWh/year of renewable electricity produced and fed into the local/national grid • 7.3 mn people to use electricity produced by project companies • USD 84mn in taxes paid by project companies • 3,500 job during construction • 114 jobs in project companies during operation • 350,000t CO2 emissions avoided p.a. • 13 project companies financed
Modern Energy in Uganda (C2)	The following outcomes were reported as being achieved: • 143 health centres with access to electricity in nine districts • 51 water supply schemes with access to electricity • 2,022 tonnes of Co2 emissions avoided
Nordic Pilot Partnership Initiative (C34) in Vietnam	This project is a capacity building project, and does not therefore generate outcomes-type data. While there was also limited project reporting, our case study found the following in terms of mobilisation of international funding to implement the NAMA: • UNDP is developing a proposal to seek for funding from NAMA facility, based on the NAMA readiness plan. Total amount in the proposal is estimated at USD 19.5mn USD. • VLEEP (a project funded by USAID) is supporting MOIT to develop an energy benchmarking for cement sector, using the CSI CO2 and Energy Protocol in the NAMA cement project.

Project	Reported outcomes/targets/indicators
	• There are several researches/initiatives related to MRV and ESCO by the Ministry of Construction according to NAMA readiness plan. • The World Bank is supporting some research related to waste use as alternative fuel for the cement sector.
African Guarantee Fund/Green Guarantee Facility (C88) in Africa (regional)	The following outcomes were reported on in the first tranche of funding: • Direct jobs: 28,500, Indirect jobs: 56,500, Temporary jobs: 1000 • Leveraging ratio of 7:1 • 10,000 tonnes of CO2 emissions avoided annually (15,00 indirect) • Reduction in seasonal flooding • USD 583 mn savings on kerosene • Over 5 million households reached with energy (on and off-grid)
ESCI (C40) in Honduras, Nicaragua and Bolivia	The study found that the ESCI approach was extended to three cities in Latin America as a result of NDF funding. There are no outcomes data beyond this.
PAGRICC (C17) in Nicaragua	• 4,483 water collection (water harvesting) structures were constructed with a total capacity of harvesting 286,912 m3 of water. In total, 311,375 m3 of water were harvested in 2013-2016, benefitting the 4,895 participating farmers. • The yields/agricultural production increased by more than 18%, and in 2016, the production value was USD 853.20 per ha compared to USD 720,20 per ha in 2012 • Based on the incomes generated from the farms, a 15-year economic evaluation of the investments in natural resource management is positive with a total net present value (NPV) of USD 2,186,844.01 and a 21% internal rate of return (IRR) (compared to the 1% discount rate), and a 1.43 cost-benefit ratio. A sensitivity analysis with a 10% reduction in project benefits showed an NPV of USD 1,461,389.80 an IRR of 18%, and a 1.20 cost-benefit ratio. • 6,642,836 plants were provided for reforestation and 2,013,376 plants were provided for agroforestry, and the assumed plant survival rate was 80%. 91% of the participants were satisfied with the quality of the plant material provided.

The only case where data were of sufficient quality to allow an approach of this kind is the PAGRICC case. There was no added value to doing this, however, as the reason why we have this data is because a detailed economic evaluation has already been done, the results of which are summarised in the table above. The important question here is NDF's contribution – i.e. what proportion, if any, of these outcomes can be attributed to NDF's investment. As our case study shows, following the informal categorisation the contribution of NDF was assessed at 'medium' around 50% of the value created. While specific infrastructure can be directly attributed to NDF funding, and NDF support played an instrumental role for the capacity development component and monitoring, the other funding partners (IDB and SDC) made equally significant contributions to the outcomes.

Data limitations in the other case studies prevented us from taking the study forward to an economic assessment, even on limited terms. Once we began to explore outcomes in more detail and engaged with the literature specific to those outcomes, the complexity of creating impact became more apparent. A notable example is renewable energy, where there is a tendency to count outputs – gigawatts produced, households reached – and where a larger number is always assumed to be better. Whilst this is in line with standard practice in this field, this approach is crude, and runs the risk of negative unintended consequences. Such data tell us little about the difference - socially and environmentally – that the projects are making to people's lives. Proper economic assessments require rich datasets, and it is important not to attempt studies of this kind unless the outcomes data are of reasonable quality, or the findings will be misleading. Instead, it is more useful to identify data gaps and ways for projects to address them in the future (see Annex 9). We provide summary details here on the data issues with respect to the individual cases.

- **rAREH (C99)**: The main source of value for rAREH is on-grid energy production. However, the methodology used for reporting this is not appropriate for inclusion in an economic analysis. Whilst the figure provided in Table 10 may be useful for illustrative purposes (i.e. to anchor the volume of electricity by converting to number of users), it is too imprecise a proxy, carrying an insufficient amount of information on value to be incorporated into an economic assessment. Further discussion of this is provided in the rAREH case study.

- **Modern energy in Uganda (C2):** The project did not provide any quantitative data on the difference that the project made to the patients of health centres and the users of the water facilities. Whilst we know how many facilities were reached, we had no information on alternative fuel use at baseline, the benefits associated with this and how this had changed by project close. An economic assessment by the World Bank of the stream of which the NDF funding was a part found a negative return on investment based solely on environmental and economic outcomes. Were social outcomes to be included, this might move to positive, but we have no way of knowing this.
- **Nordic Pilot Partnership Initiative (C34)**: Some types of projects are not amenable to systematic outcomes data collection, such that the qualitative methodologies employed in case studies (e.g. C34), was the most appropriate way of assessing impact. However, whilst we can say that capacity was built in the short-term, we cannot conclude the long run impact. Again, without these data, the more important outcomes relating to creating systemic change (e.g. in cement production) cannot be evidenced.
- **ESCI (C40):** The 2010-2015 evaluation and lessons learned covers 20 of the 71 cities supported by ESCI, including two of the three cities funded by NDF (Cochabamba and Managua), but it does not cover Tegucigalpa. For the cities evaluated, the report provides only generalised findings with little information on NDF's engagement or the NDF supported cities. Similarly, the 2016 thematic evaluation covers the entire ESCI programme with only brief references to NDF and the NDF supported cities.
- **AGF/GGF:** This case study suffered from similar challenges to C2 and C99 in terms of a) lack of data on the difference that electricity made to people's lives and b) the limitations of the standard approach to measuring on-grid energy. Despite this, an economic assessment was attempted (see below). This analysis is heavily caveated, as it was based on a limited number of

outcomes and the data included could not be verified. This led to a large number of assumptions being used.

The findings from the SROI-informed economic analysis on the Green Guarantee Facility (GGF) found that were the GGF able to achieve the outcomes set out in its monitoring report, there would be a positive return of USD 2.42 for every dollar invested. The main source of value in the analysis came from the large number of jobs created by the initiative but little was known about these jobs, as they were presented as a decontextualized number. As discussed, had more data been available (e.g. on the potential for productive uses of electricity, or the value of black carbon emissions produced), the value generated is likely to have been higher.

What the other case studies show are that there is clear potential for NDF to achieve impact where the conditions are right. It is irrelevant whether the project can show whether outcomes are being achieved, if these cannot be shown to be additional and attributable at least in part to NDF. The case studies provide a useful illustration of this. For example, we can contrast C40 and C2 with C99 and C17. In the former two, NDF was a small player in a large project that entered late in the day. The potential for impact is limited in this scenario. In the latter examples, although there were also other actors, NDF was involved at an earlier stage and had more potential for impact. A clear finding here is that additionality is at least as important to take account of as outcomes but a focus on both is currently missing from the NDF approach.

5.1.6. Gender

The lack of centrally collected data on gender makes it impossible to assess how generalised the gender focus is, or whether it has improved over time.

While the partner interviews support the view that gender is a priority for NDF, and there is some support for this from some of the case studies, available NDF data on gender in their projects is limited and scattered throughout various documents.

For partners, one MDB interviewee said that NDF brings a strong gender perspective to their discussions, and this was also the case with more than one private sector partner, for example, in the case study C99.

The evidence from the case studies is mixed; there is minimal evidence of emphasis in older projects (e.g. C34), but gender appears to have a greater focus in more recent ones (C99). In our case study of rAREH (an African renewable energy project developer), NDF initiated the development of a framework by responsAbility to link the rAREH's impact themes with the global agenda of the UN Sustainable Development Goals (SDGs). NDF also asked rAREH to include clear targets (in figures) for women and vulnerable groups in the hiring plans and the E&S performance reports state the number of female and people with disabilities. However, even with more recent projects (e.g. C88), disaggregated beneficiary numbers are not always available.

Gender mainstreaming may be more advanced in NCF than NDF. The NCF survey shows that almost all projects have a gender focus by the time of grant agreement and partners for calls 7-9 (will) collect data for both male and female beneficiaries.

In interview, NCF partners were also ready and able to talk about the gender dimension of their work, and all projects provide disaggregated gender data.

Returning to the data issue, the lack of consistent data on gender makes it difficult to draw firm conclusions about how important gender is to NDF, and particularly whether this has changed over time. We provide further data recommendations in the sub-section on M&E related recommendations in Chapter 6.

5.1.7. Suitability of the mandate and strategy

As described above, the mandate is formally unchanged since 2009. The mission has been effectively amended by the Board since then. Interviews with NDF staff and Board members did not identify any appetite to change the mandate, which is unsurprising as it would require acts of parliament in each of the Nordic countries to do so.

The general nature of the mandate gives NDF significant freedom in terms of activities, which is clearly welcome, but there may also be a need for more focus and direction in terms of strategy, perhaps through refining NDF's mission. The scale of the climate finance gaps was often referred to in interviews, as was NDF's small size relative to larger players. The need for NDF to focus on areas where it can have the greatest impact with its resources is therefore essential.

Given the level of climate financing needs, almost any type of intervention will be positive. This does not take account of opportunity cost, however. A more focused and explicit ToC than that which is currently implicit would enable NDF and its owners to ensure that investment choices are taken systematically. This is entirely compatible with the current mandate and will be returned to in the recommendations chapter (see Chapter 6).

5.2. What is NDF's added value in an international perspective? (EQ2)

There are a number of ways that NDF could add value internationally: (i) the objectives it pursues; (ii) the financing and tools that it uses to achieve these; (iii) the partners with which it works; (iv) the contribution to knowledge and capacity building; and (v) whether it brings a distinctive Nordic component to its work, which adds value. With the exception of the Nordic aspect, we NDF adds value in these areas, but also that maintaining this requires key risks to be understood and mitigated.

Based on our analysis, the team has come to the following conclusions with regards to NDF's current added value:

- **NDF is developing a valuable niche in the international climate finance architecture.** It needs to strengthen in some areas, particularly with respect to measurement, focus and Nordic links, but it has shown an unusual ability to adapt and evolve (interview evidence). Its ability to move quickly, and deploy finance with different levels of concessionality, tailored to the needs of particular projects, is valuable and unusual (partner evidence). NDF focuses on crucial issues in countries where needs are great (portfolio analysis and literature review) and combines innovative approaches (e.g. testing new business models for adaptation through the CRAFT project) with influence derived from long-standing partnerships with key development actors (i.e. the MDBs) (section 5.2.2).

- **NDF's Nordic identity is a unique source of potential comparative advantage that is not currently being exploited.** A number of influential actors argued in interviews that NDF's Nordic identity was a key source of advantage in terms of a) links to Nordic firms with valuable technology, b) shared values amongst Nordic countries in terms of environmental and social issues, and c) the potential to integrate the 'Nordic model' of development, or elements of it, into its activities (section 5.2.6).
- **For NCF to add more value with respect to NDF's objectives, it needs to be better integrated with NDF.** The only reason for NDF to host NCF is if they are part of the same coherent theory of change – e.g. NCF 'incubates' projects which NDF subsequently funds, enabling them to increase in scale towards commercial viability. While a recipient of NCF funding suggested in interview that links to NDF would have been valuable, this conclusion is self-evident in our view (chapter 5.3).

NDF should understand and mitigate the risks to its value creation, and actively seek to develop its niche role, including as a Nordic institution. Recommendations to support this are covered in Chapter 6.

The following sub-chapters present more detailed findings with regards to this second evaluation question.

5.2.1. How could NDF add value?

There are a number of ways that NDF could add value. We define this as either directly generating impacts that would otherwise not have happened, influencing or catalysing others to do so, or helping to create the conditions to enable additional impacts (e.g. knowledge-generation). In this study we considered the following forms:

- the objectives it pursues;
- the financing and tools that it uses to achieve these (including its ability to catalyse capital);
- the partners it works with;
- the contribution to knowledge and capacity building; and
- whether it brings a distinctive Nordic value to its work.

Taken together, these forms of value-add will determine the impact that NDF has at the portfolio level.

For our assessment we distinguish between impact and financial additionality. The conditions under which they are likely to be achieved are as follows:

- **Conditions for impact**: to achieve high-impacts, focus areas need to be important from a climate-change perspective (either in terms of mitigation or adaptation or both), the needs of potential beneficiaries should be high relative to other groups (e.g. LICs), and there should be a clear funding gap (e.g. SMEs).
- **Conditions for financial additionality**: for NDF to be financially additional, either other actors are not in a position to provide suitable financing, or they may be unwilling to do so. There are 4 ways that NDF can add value in these circumstances: a) NDF may be able to directly deploy (or indirectly mobilise) the right kind of finance when others cannot, either in terms of size or type of resources it can use; b) NDF may have influence with key financiers that others do not; c) NDF may have greater specialist knowledge than others; or d) through its Nordic identity it is able to do things (directly or indirectly) that non-Nordic actors are unable to.

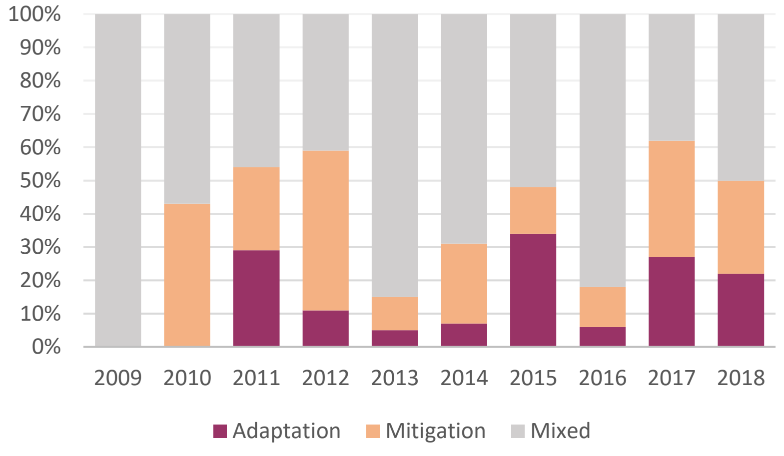
Additionality is also addressed at the project-level via the case studies, where we consider other elements such as attribution of outcomes to NDF. These have been guided by the approach to additionality used in the SROI methodology. The remainder of this sub-section focuses on the value added at the portfolio level for each of the elements set out above.

5.2.2. Contributions to the international climate architecture

NDF's increasing focus on adaptation adds value, as does its growing expertise on fostering private sector business models in the adaptation space.

From a climate change perspective, NDF aims to mitigate climate change, support adaptation to the effects of climate change, or a combination of the two. Developmentally, NDF aims to improve incomes and living standards, narrow inequalities and promote women's socioeconomic development and empowerment. These ends are pursued through a variety of means, such as private sector development (PSD), market development (including financial markets), urban development, infrastructure provision, and enhanced community resilience. As well as direct involvement in these types of activities, NDF seeks to generate knowledge about how they should be done, and to mainstream this knowledge into public policy and the practices of other development actors, notably the MDBs.

Figure 7 Annual disbursals by category 2009-18



Source: Author's own analysis based on data provided by NDF

Figure 7 shows the share of annual disbursals to adaptation, mitigation or mixed projects. The main trend is a reduction in the importance of straight mitigation projects relative to adaptation and, from 2011, mixed projects. By 2018, 22% of the portfolio was invested in adaptation, 28% in mitigation, and 50% in projects that combine both objectives.

In terms of value-added this is important. Globally, far more has been invested in mitigation than adaptation. While both areas need far more investment, it is adaptation that faces the greatest gap.[19]

The increasing focus on adaptation is therefore of clear value. This view was supported by many of the interviewees. As well as identifying adaptation as the most significant gap in climate financing, a number made the point that this gap will not be filled by official climate finance transfers. Even if the developed countries' commitment to transfer USD 100 bn per year for mitigation and adaptation from 2020 were honoured, and assuming an equal split between mitigation and adaptation, estimated adaptation costs remain far higher.

For many, the solution is to increase private investment in adaptation related activities. NDF has responded to this by supporting projects that seek to identify new business models which support adaptation or identify existing practices that could be transferred for use in this area – the CRAFT project is a good example of this[20]. This approach is seen as important by many interviewees – i.e. not just those that work with NDF on these issues. It has been described as important and innovative work with huge potential to add value. As with all innovation, however, success is not guaranteed. Long-term, the value created will depend on how many projects succeed and can be scaled-up significantly. The process of discovery is an essential one, however. Failures are also valuable, as long as lessons are learned and disseminated. This is also important for NCF, where the focus is on riskier projects financed through grant funding and a tolerance for failure.

While it is clearly important to increase private sector involvement in adaptation, it is far from easy. As the relative costs of renewable energy production has fallen, the business case for

[19] Estimates of the costs of adaptation in developing countries range from USD 140 billion to USD 300 billion per year by 2030 (UNEP 2016). Current official climate finance transfers to developing countries are around USD50bn, most of which goes to mitigation. Annual adaptation financing, including mixed mitigation and adaptation, is around USD10bn, and this is an historic high. Cumulatively, the overwhelming bulk of climate finance has gone to mitigation.

[20] Climate Resilience and Adaptation Finance and Technology Transfer Facility (CRAFT): https://www.ndf.fi/news/ndf-supports-new-climate-resilience-fund

investing in renewable energy facilities has improved. This is likely to continue. Adaptation is different. It is important to distinguish between the need for new products and services that adaptation creates and are therefore an economic cost to those that need to adapt, with products and services that are an economic benefit to these groups, while also helping them to adapt. Climate change creates more volatile weather conditions, and greater risk of extreme weather events. This increases the need for products such as monitoring and early warning systems, as well as insurance, to reduce uncertainty and protect people against crop failures. It also creates the need for additional infrastructure, such as flood defences. These are not a benefit to groups needed to adapt, however, but an additional cost that must be borne because of climate change. While there is a good case for private sector innovation to provide products of this kind, it is far from clear that the costs should be met by those needing to adapt.

For mitigation, providing renewable energy can directly address energy poverty, and is therefore a clear potential development benefit. The equivalent from an adaptation perspective is the provision of valuable goods and services that people did not previously have (or that improve on what they had), which are positive from an adaptation perspective, and the production of which also generates jobs and livelihoods. This is perhaps harder than the previous set of activities, but in the longer term the development of adaptation business models that are a benefit rather than a cost to poor people has vast potential value.

A note of caution is needed, however. NDF, like many others, can see that adaptation funding needs are vast and that public climate finance transfers will never be able to meet these. They also see that developing country governments cannot meet these costs, and perhaps conclude that neither should they given developed country commitments to meet the incremental costs of climate change. While it is reasonable to conclude that the private sector is the solution, it does not follow that private firms and investors will be able and willing to fill the adaptation funding gap. There will be some – perhaps many – adaptation needs that are not suited to private solutions.

Seeking innovative, private-sector business models to address adaptation challenges is essential, but not all issues are amenable to these types of solutions. The risk is that scarce resources are wasted looking for solutions where they are unlikely to work rather than concentrating on those where they might (expert interview evidence).

There is a need for deeper analysis of the areas where private sector activity can add most value, and the limits to this, including who should pay for new goods and services as discussed above. Given NDF's leading role in this space, there is a case for NDF to help to initiate this work. As well as informing its own activities – i.e. by enabling them to focus on developing private sector solutions where they are most likely to work and add value – this would be useful for other actors working on adaptation finance. This is a crucial issue, and one where NDF has the potential to make a real contribution to the climate finance landscape.

While the weight given to pure mitigation projects has declined in NDF's portfolio, there is a focus on smaller projects (off-grid and mini-grid), and on reaching poorer, rural communities. Again, this addresses a clear gap in mitigation finance, the bulk of which goes to larger on-grid generation projects, which are inevitably focused more in urban than rural areas.

The importance of mixed projects reflects the integrated nature of development. A good example is the increasingly important issue of urban development. NDF is increasing its focus on this issue, and this makes sense in terms of need and potential impact. To date, NDF has worked with Inter-American Development Bank (IADB) in Latin America on a programme to plan and finance sustainable urban development across the region. NDF's focus was in its three Latin American focus countries, and its finance enabled the IADB programme to extend to cities in these countries. While NDF did input to the wider programme, this was relatively limited as it was a large, multi-donor programme implemented by the IADB. Most of the value, therefore, was in the programme's extension rather than its original design. This issue will be developed further below in the discussion on partners.

To summarise, it is clear that NDF is operating in areas of high potential impact and high potential need. It is trying to find innovative solutions to complex problems, which either are not amenable to traditional solutions, or for which traditional solutions are unlikely to be available. It may also be that the types of solutions sought cannot work, but this will not be known without experimentation. In our view, NDF is central to cutting-edge work in this area and has the potential to become even more so.

5.2.3. Financing and mobilization

NDF's use of a range of financial instruments adds value, as does its supply of concessional finance/'patient capital'. NDF is able to catalyse investment most successfully as an early-stage anchor investor.

NDF is small. It disburses around EUR 50mn per year with an average ticket size of EUR 5mn. In terms of the overall climate financing funding gap, NDF cannot expect to have much of a direct impact. Nor can it expect to directly address gaps in areas requiring large-scale finance such as infrastructure. It can, however, address particular gaps that require smaller quantities of finance that may not be accessible from larger actors.[21] Beyond this, there are several ways in which NDF could add financial value:

- **Anchor investor** (proves models and mobilises additional public and private finance)
- **Grants/project preparation** (tests the feasibility of new business models and market systems, prepares a pipeline of bankable projects with high potential environmental and social value, and improves the environment within which investments take place)

[21] For example, NCF's challenge fund model, which awards between Euro 250,000 and 500,000 grants to projects to enable them to test and prove concepts and move towards the scale where they might be commercially 'bankable'. The question of NCF's effectiveness in achieving its goals are assessed in a separate note, but its broader function within NDF will be examined below.

- **Mixed, flexible funding and risk-taker** (provides the right kind of funding at the right time, enabling projects to happen, and increasing the likelihood that full potential benefits are realized.

Below we discuss each in turn before reflecting more generally on the value of the move from grants to equity loans.

NDF as anchor investor providing patient capital

As well as providing funding directly to small, innovative projects, the size of funding that NDF can provide is suited to an anchor investor role in a larger fund that can mobilise additional investment from other actors. A number of positive examples were found in this regard. NDF's anchor investment in the IDB Pipeline Accelerator Trust Fund was reported to be crucial in obtaining further investment from Dutch and Swiss development agencies. In the case of both rAREH and the Green Guarantee Facility, NDF intends to act as an anchor investor to reduce the risk perception of future investors. In the rAREH case study, interviewees highlighted the fact that NDF can provide more "patient capital" than other investors. More generally, the fact that NDF is able to absorb more risk than other investors and can accept lower potential returns through the ability to deploy concessional finance to various degrees, clearly adds value in attracting other investors.

As well as the viability of the vehicle, the crucial determinant of additionality is timing. Being the first to invest in a new area and attracting others through reputation or proof of concept is highly additional. Arriving later to invest in a similar vehicle is less obviously so. A good example is the Climate Investor One investment. NDF has invested EUR 5 mn in a fund to help prepare a pipeline of investable projects. Funds of this kind are very important, but this is already large with several major agencies involved. While NDF may be bringing something particular to the table, this is less obvious than elsewhere. Another example is the Ugandan Modern Energy Project (C2), where the timing of the investment provided little scope for NDF to impact on the design and implementation of the project.

Returning to the GGF example, whilst the first investment was clearly crucial to create the fund (and to influence AGF more broadly), it is less clear that the subsequent equity investment was as additional. Although demand outstrips supply for the product, NDF can never meet this demand, even if it were several times larger. It may have been more impactful to focus on attracting new investors to the fund. NDF argue that this tranche had discrete objectives, coordinated with other donor agencies, and was instrumental in securing subsequent investment. We do not dispute this, but merely suggest that subsequent rounds of funding for the same entity should be carefully assessed in terms of additionality, with a focus on the opportunity cost of the deployed resources.

Grants/Project preparation funds/Technical Assistance (TA)

The use of grants for feasibility studies, pilots or other preparatory activities can be highly catalytic. The most striking example of this is the West Africa Coastal Area Erosion and Adaptation (WACA) project, where an early EUR 500,000 grant from NDF to build capacity and systems, has led to a EUR 200mn investment from the World Bank and Global Environment Facility. NDF cannot claim full credit for this, as the project was a partnership with the World Bank from the outset, but it is certainly the case the NDF's investment was an important part of the story. If NDF continues to work with new financial instruments it is important that the high catalytic value of grants, when used strategically, is not forgotten. The use of grants in combination with reimbursable capital is also very useful, as it enables the capacity of project staff (e.g. rAREH), or the capacity of other stakeholders that are key to project success (e.g. bankers that may provide SME loans because of the African/Green Guarantee Facility) to be enhanced.

In the case studies, we observed several strategic uses of TA grants. For example, NDF was one of only two investors in rAREH's Technical Assistance Facility, which aims to build capacity with local promoters and financial institutions and support the development of renewable energy projects that rAREH expects to invest in. In the case of PAGRICC (C17), NDF engaged a consultant to provide technical support and advice, which improved the implementation of the project.

These projects can also make a useful contribution to the wider climate finance knowledge base. For example, not all anchor investment or strategic grants will mobilise significant investment, and although many will fail, the process of discovery has intrinsic value, and knowing what does not work is also important. This will be returned to again in the next sub-section discussing NDF's partners.

Mixed, flexible funding and risk-taker

NDF can now deploy a range of financial instruments with different levels of concessionality. This gives them unusual flexibility, enabling finance to be tailored specifically to the needs of different investments. From early grants, to reimbursable grants, and equity and loans. This supports projects making the transition from grants to commercial finance, as NDF is able to absorb higher risks than commercial actors and can therefore help attract other investors to projects that it supports (case study evidence from rAREH). It reduces transaction costs through being a 'one-stop shop' for different financing. As described by one interviewee, having a 'one-stop shop' for different forms of finance is valuable as it lowers the transaction costs of having to engage with different funders (interview evidence from private partner).NDF's ability to be flexible in the finance it offers – for example, where there is a particular risk tranche missing from an investment fund – is also rare. Finally, as attested by a number of interviewees, the fact that NDF can take decisions more quickly than larger, more bureaucratic funders, is highly valued by its partners, particularly private actors.

In the GGF case study, NDF provided a capacity building grant at the outset prior to an equity investment. NDF also plans to provide further grant finance in 2019 to support better monitoring of the project. This level of flexibility is likely to give NDF an additional edge relative to other funders.

While there is strong potential for value-addition, this is not inevitable. Being able to select different forms of finance is only valuable if you have the skills to select the right ones. A number of interviewees commented on the fact that NDF seems to have done well in this regard, particularly as it only began making these kinds of investments in 2016. Partly this has involved hiring new people with the right skills, but existing staff at NDF have also proved highly adaptable.

There are several case examples, however, where NDF, rather than being a risk taker appears to have limited its exposure to risk. ESCI and UMEP are two such examples where NDF provided funds through an intermediary development bank and was one of many (larger) investors.

There are three potential risks that should be noted going forward. First, NDF may have just been lucky to date, and luck tends to run out. Second, it could have invested wisely, but is unable to retain the skilled staff to maintain this, not least as the work pressure on them – and the alternatives available for these highly marketable skill-sets – are significant. Third, incentives emerge to use less and less concessional finance in their investments. As one interviewee put it, 'no-one wants to be the patsy at the poker table'. When discussing investments with potential partners, it is not difficult to see how NDF might not always want to be at the 'bottom of the food chain' in terms of the risks they are assuming and/or the returns they will get. More prosaically, it is no doubt more interesting to design and structure complex financial instruments than dispense grants, distinct from their respective merits.

The move from grants to loans

There is a global scarcity of concessional finance, and a particular scarcity of grants. All the MDBs are clear that without NDF's grant finance, many of their shared activities would not happen, or would not achieve the level of impact they do. This was the 2009 rationale for NDF's approach, and the evidence from partner interviews would suggest that it has been largely successful. This raises the question, what is the value of diversifying away from grants?

There are two parts to the answer: internal and external. Internally, NDF has seen its long-term capital base erode over time as it has disbursed grants but received no capital replenishments. This has been funded from reflows from long-term loans made prior to 2009. Reflows will peak relatively soon and then start to decline. If nothing else is changed, NDF will be in a position to make ever smaller annual disbursements and will ultimately disappear. A strong internal rationale for the shift towards returnable capital is thus to offset this trend by creating the prospects of new reflows.

Externally, the world has changed. The SDG funding gap, and resultant 'billions to trillions' agenda, has led the MDBs and most other development actors to focus on mobilizing private investment, and using their resources more judiciously towards the same goal. This has been compounded by fiscal tightening in OECD countries and pressures on aid budgets, with the result that grants are less common. Blended finance structures have become more widely used, as has the provision of finance on market terms through development finance institutions (DFIs).

As well as the supply constraints of grants, there is a growing demand for non-grant finance. Grants can support projects to become more bankable but the journey to commercial finance can be long, especially for smaller ventures, new business models and those operating in challenging markets. NDF seeks to be a bridge from grants to commercial finance and can offer funding on more concessional terms than financiers like DFIs, which have become more market-oriented. NDF also retains the ability to use grants through TA budgets and NCF for earlier stage finance, which both increases the chances its investments succeed and helps ensure a pipeline of new and innovative project.

While there is demand, this does not prove additionality: many others may be trying to do the same. In terms of value-addition, NDF's shift away from grants is justifiable only where there is significant demand, *and* this is not being met by other actors (see example of GGF above for example).

A more general example is the development of new private sector business models for adaptation. According to interviewees, NDF is something of a market leader in this space and there is a strong case for continuing and expanding this work. This does not only apply to equity or loans, but also NDF's ability to deploy grants. Very little is known about what might work effectively in this space, and this can only be addressed through research, pilots and trial and error. Again, many things will fail, and it is highly unlikely that these types of investments will be profitable for NDF even if investments were made using returnable capital. This needs to be kept in mind when considering future funding options for NDF.

5.2.4. Partners

NDF can add significant value through its influence on the MDBs, but case studies show this is not always the case, particularly where it is a relatively passive partner. New private sector partnerships have the potential to be strongly value-additional, but this is dependent on NDF's ability to positively influence these actors, and/or foster new relationships between them and the MDBs.

For most of the time since 2009, NDF has largely partnered with the MDBs. The first column of Table 11 shows annual investment with non-development bank actors – largely private partners[22]. In most years prior to 2016 this was zero or close to it. Since then, the proportion of annual investment with these types of actors has been between a quarter and a third of total annual disbursals. These are also large investments, so that by 2018 23% of the total portfolio was invested with non-development bank actors.

Table 11 NDF Partners: Non-development banks and development bank breakdown

	Non dev Bank	Dev bank total	ADB	AfDB	IADB	WB	IDB/ MIF	FMO
2009	49.0%	51.0%	9.56	0.00	0.00	90.44	0.00	0.00
2010	0.0%	100%	16.74	0.00	29.06	54.21	0.00	0.00
2011	0.0%	100%	60.62	0.00	35.80	3.59	0.00	0.00
2012	0.0%	100%	6.26	0.00	44.91	48.83	0.00	0.00
2013	16.0%	84.0%	16.80	0.00	62.20	21.00	0.00	0.00
2014	1.2%	98.8%	29.78	36.43	21.51	12.28	0.00	0.00

[22] It should be noted that 'private' is defined in a legal sense. The AGF is classified as a private entity, for example, but it is entirely funded by donor agencies. Others are closer to being private investors. While all of these entities work closely with donor agencies, all actively seek to mobilise private investment, and are at different stages of progress in achieving this.

	Non dev Bank	Dev bank total	ADB	AfDB	IADB	WB	IDB/ MIF	FMO
2015	0.0%	100%	17.56	20.86	21.85	37.74	1.99	0.00
2016	31.8%	68.2%	22.06	17.36	18.80	41.78	0.00	0.00
2017	24.2%	75.8%	0.00	1.28	44.63	54.09	0.00	0.00
2018	22.9%	77.1%	0.00	28.30	0.00	58.22	0.00	13.5
2018 weight	**14.3%**	**85.7%**	**17.02**	**13.90**	**28.56**	**38.47**	**0.19**	**1.85**

Source: Author's own analysis based on data provided by NDF

The MDBs

Within development banks, the largest partner is the World Bank, with 38% of investments. This is followed by the IDB with 29%, the ADB with 17% and the AfDB with 14%. Over time, the biggest change has been the commencement of partnerships with the AfDB in 2013, and a reduction in co-investment with the IDB at the same time. 2017 sees a reversal of this for a single year. The overall trend reflects the strategic guidance to increase investments in Africa discussed above.

It is clear from the interviews that the MDBs highly value NDF as a partner. Two of the four interviewees described NDF as the best partner they have. A third saw NDF as the 'gold standard' by which partners could be judged. Interviews conducted through case studies were also very positive about NDF as a collaborator. With the MDBs, NDF's modus operandi is similar in each case. Visits are made to the headquarters of the MDB at least twice a year. During visits, NDF discusses programmes that the MDB is planning, or are underway, which the MDB believes may be of interest to NDF. If there is interest, discussions proceed to a more formal stage with concept notes, legal arrangements, the design of log frames and monitoring systems, and so on. In some cases, funding is channelled through the MDB, which is then the implementing agency. In others, NDF and the MDB both finance a third party separately, with the third party being the implementing agency.

In other cases, NDF initiates discussions, coming to the MDB with an idea to gauge appetite to work together in this area. A number of examples were given of initiatives begun by NDF that had led to substantial programmes – health and climate change within the World Bank being a good example.

Finally, some programmes are developed jointly, emerging from discussions around a topic, or through the experience of one party. Regional MDBs were particularly interested to learn of NDF's experience in other regions, including how these could inform their own programme design and implementation. The close, long-term nature of NDF's relationship with the MDBs means that such joint programmes are likely, as both sides know each other well and know where there is interest and expertise. The same is true of projects initiated by one or the other. Each know well what is likely to appeal to the other, including how it could be tailored to do so. These features are extremely important in terms of maintaining a smooth working relationship between NDF and the MDBs.

For most of the time that NDF has worked with the MDBs, financing has been in grant form. This is greatly valued by MDBs, particularly by those other than the AfDB, for whom access to grant financing is difficult to obtain. In most cases, the MDBs welcomed NDF's use of non-grant instruments, not least as it goes with the grain of what they themselves are doing. At the same time, the ongoing value of grants was stressed by all MDB interviewees. While most saw the use of reimbursable, but still concessional, instruments positively – as they enable NDF to engage in a wider range of activities – one MDB questioned this strategy. They saw NDF as too small to provide loans and equity at the scale that would enable partnership and argued that this also required a new set of skills to be acquired. Given the ongoing need for grants, and their strong catalytic effect in areas like project preparation, doubt was expressed over the wisdom of spreading resources more thinly by moving into this area. It should be noted, however, that it is MDBs with scarce access to grants which will clearly value NDF's ability to provide this, and that remarks about moving away from grants should be taken in this context.

There was universal agreement on NDFs value in the following areas: knowledge of the climate change space and willingness to take risks and innovate; flexibility and openness to new ideas; ability to take decisions quickly; competence and professionalism of staff;

constructive contributions in multi-donor settings; and a high reputation with other potential partners, aiding mobilization efforts. All stressed the strength and depth of their relationship with NDF, which has been developed over many years and makes the process of working together far smoother than is the case with other partners. While most welcomed NDF's partnerships with private actors, it was noted that NDF is a small organization, and managing too many partnerships would be costly. While this is certainly a valid point, it is also the case that the MDBs have an incentive to keep NDF close to them.

The strong relationship that NDF has with the MDBs is important. One way that NDF could be additional is through its influence on partners. In international development, there are few actors more important than the MDBs, in terms of the resources they can directly deploy, their ability to mobilise finance, and their agenda-setting role. A number of examples where NDF has played this role effectively were found, particularly in increasing the importance of the climate change component of MDB operations. In other cases (e.g. UMEP and ESCI), however, it was less clear. Other than providing a small component of the financing – though not small for NDF – NDF does not seem to have had much influence in either case. More recently, NDF has partnered with the World Bank on two large road projects in South East Asia. While this could be justified on the basis of building climate-resilient transport, NDF is too small to make a difference in large infrastructure projects, and the type of influence that NDF could potentially have is unclear. As one interviewee pointed out, ensuring that roads are constructed to be resilient to climate change should be a core part of any major project and is an engineering rather than adaptation issue. It could be assumed that the World Bank knows this and is acting accordingly.

In discussions with NDF, it was argued that NDF has been an important influence in mainstreaming climate considerations into transport and should therefore continue to work in this space given its experience and comparative advantage. The alternative view is that NDF's job is done and its resources would be more effectively used by shifting to an area that is not yet mainstreamed but needs to be. Path dependency is an obvious risk for institutions like NDF.

Just because you have done something successfully in the past and have the skills and people to continue to do so, does not mean this is the best use of your resources. The points about additionality, particularly the need to be an early mover in a new area, if impacts are to be maximised are important to remember. A more explicit and focused ToC to guide decision-making would be very helpful in our view, as would a more systematic way to measure potential impacts – and therefore the opportunity costs – of competing investment options.

When partnering with the MDBs, the implementing agency matters. When NDF money is given to an MDB, which is also the implementing agency, MDBs are likely to offer less scope for influence (again this was the case with both UMEP and ESCI). There is a trade-off here: these kinds of projects allow NDF to 'piggy-back' on MDB country-level resources and reduce the need for a local presence. However, these could also be what were described as 'take the money and run projects'. The potential for piggybacking can also be limited. With M&E for example, some partners, such as the World Bank can be unwilling to share impact data with NDF and/or to include new indicators in the performance monitoring system that is applied. These projects are frustrating for NDF because the potential for building on partner resources does not materialise. The PAGRICC case studies highlights this tension. The advantages of providing the grant directly to the Government was that NDF had a direct involvement in, and influence over, the project. At the same time, the separate funding stream limited the extent to which IDB resources and in-country presence could be mobilised to supervise the utilisation of NDF funds,

To conclude, NDF is in an unusual position in being close to the MDBs as it is a highly respected, trusted and preferred partner. This does not mean it should necessarily continue to work as much with the MDBs as it has in the past though. Being 'flexible' and easy to work with are not inherently positive but could indicate that NDF is less trouble than other partners and has the type of finance the MDBs lack. It is clear what the MDBs get from the relationship, but NDF needs to ensure that each project is valuable from its perspective as well. A better balance between projects initiated from either side would help – one interviewee put this at 75% from the MDB side and 25% from NDF, though historically this would have been more weighted towards the MDBs. As well as balancing this, jointly conceived projects are also more likely to be valuable for both parties. Finally, if NDF is to broaden its partner-base, it may need to invest more in internal resources to build functions such as ESG monitoring and M&E where it has historically depended on MDBs.

Private sector partners

NDF is now working with a number of private and quasi-private actors. All speak highly of the experience, and NDF staff have similarly positive views. Private partners value NDF's flexibility and ability to take decisions quickly. NDF is seen as better than other development and climate finance institutions in this respect, as is its greater 'private sector mindset'. More than one interviewee noted that NDF did not try to dominate the design of projects but recognized these needed to be shaped to suit private investors. Again, this was contrasted with other donor agencies.

As with the MDBs, it is easy to see why private actors would like to work with NDF. They get a professional, flexible partner who can take decisions quickly, is open to innovative ideas, understands the needs of private investors, and is willing and able to deploy concessional capital of different forms, and at different times, as circumstances demand. This is exactly what those constructing investment vehicles that seek to attract private investment need in an anchor investor.

Again, however, NDF needs to ensure that investments are also as additional as possible from its perspective. To return to the conditions above, the value of anchor investing is clear, but only where others are not willing or able to act. If NDF invests at a later stage, this is less likely to be catalytic in terms of mobilization. In these circumstances, other forms of additionality are essential, such as the ability to meaningfully influence investment strategies or the pipeline of potential investments. One MDB interviewee praised NDF's innovative approach, suggesting that opportunities to replicate success were not taken as NDF sought to move on to new and unproven areas. The same approach should be taken with private sector partnerships, and the temptation to invest in success resisted.

Moreover, as pointed out by one interviewee, many private actors would want to work with NDF but cannot if they have not heard of it. This may not be restricted to the private sector. A climate finance expert interviewed, who has worked in this space for 30 years, attending all the major events and working with major climate finance institutions, had not heard of NDF. While this is just one example of course, other interviewees attested to the fact that NDF is not particularly well known outside its immediate networks. This may be a consequence of NDF not having specialist marketing and relationships management staff (see Recommendations).

Other Nordic climate finance institutions

An underdeveloped area of potential partnership is with Nordic environmental and development finance institutions. There is clearly scope to partner more with the bilateral Nordic DFIs, all of which operate in similar countries to NDF and have highly compatible objectives.

While detailed discussions would be needed with each of these DFIs to identify potential areas of collaboration, as well as appetite, our provisional assessment is that potential is greatest with Norfund and Finnfund. As well as a strong climate-change focus, the former has expertise in SME fund investments, which could be complemented by NDF's experience with the African Guarantee Fund, where it supported the creation of a Green Guarantee Facility to catalyse lending to environmentally focused SMEs. As part of this, NDF has supported the expansion of knowledge on defining 'green' SMEs, as well as managing the credit risks associated with these types of companies. Working with Norfund, and a specialist fund manager, to design and implement a green SME fund in shared focus countries would seem a potential fruitful area.

Finnfund has a strategic goal to expand its agriculture portfolio, particularly smaller scale, innovative, projects, which have the potential to be commercially viable, are aligned with adaptation needs, and are positive for equity and inclusive growth. It has not proved easy for Finnfund to identify investments that meet these criteria, and there seems a very clear link with NDF's focus on identifying new business models for adaptation. It may also be possible to identify similarly shared goals with the other DFIs, such as Swedfund's focus on women's empowerment. Swedfund has also identified health as a strategic sector and is developing its health portfolio. NDF has indicated to the evaluation team that health is also a sector they would like to develop in the future, which may create potential for synergies. With IFU, the clearest potential partnership would be with the Danish Climate Investment Fund (KIF), which it manages, but KIF is now fully invested.

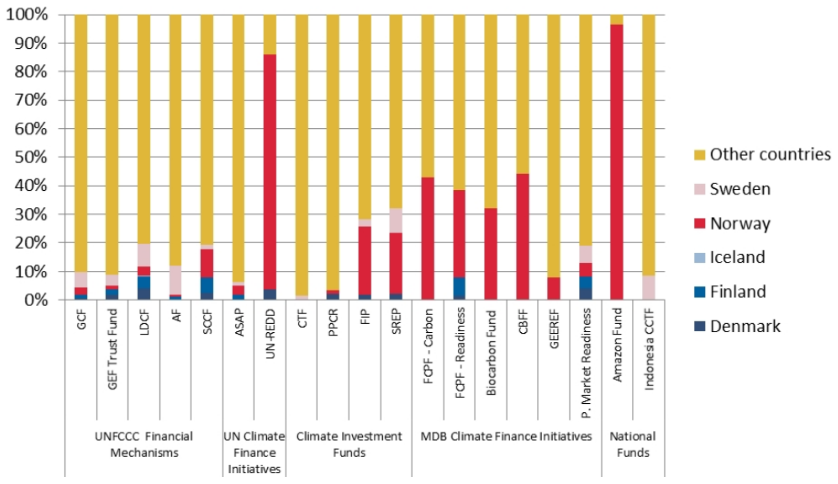
Perhaps the most obvious potential Nordic partner for NDF is NEFCO. Numerous interviewees expressed surprise that NDF and NEFCO did not work more closely together. While some thought them very similar organisations, our view is that they are complementary rather than replicative. NEFCO does not have the development focus of NDF[23], and works in different countries, but most of the projects it undertakes would be very compatible with NDF were they to occur in NDF's focus countries. Where NEFCO differs is that it lends to, and invests directly in, Nordic companies, enabling them to implement green projects in target countries. This is similar to the original aims of NCF, which sought to incentivise Nordic firms to invest in developing countries, though the incentivizing mechanism differs. NEFCO also lends directly to municipalities in the countries in which it operates, to support sustainable urban development. In both areas, NEFCO has a strong track record and has developed skills and assets that complement NDF well. NEFCO holds an extensive database on Nordic SMEs, which has major potential in facilitating Nordic investment in developing countries. It is also highly experienced in assessing credit risk, structuring and pricing deals, and managing financial risk.

From the other side, NDF brings decades of knowledge of the developing country markets that NEFCO lacks, strong expertise on the links between environmental and development objectives, uniquely strong ties with the MDBs and access to other climate

[23] This appears to be changing with NEFCO showing an interest in working in developing countries. The recent creation of a Swedish financed trust to incentivize new private business models for energy investments in rural and peri-urban Africa is a good example.

finance networks, and a growing experience in blended green finance. One option would be to identify an area of common interest (e.g. sustainable cities in Africa), which was also of interest in the Nordic capitals, and co-design a vehicle suited to this.

Figure 8 Nordic contributions to international climate finance institutions



Source: Climate FundsUpdate, 2016

As well as bilateral and shared institutions, Nordic countries are important actors in the multilateral climate finance architecture, as shown in Figure 8. Their contributions span different mechanisms, including contributions to funds within the UNFCCC framework (e.g. Adaptation Fund, GEF, GCF), climate finance initiatives led by multilateral development banks (e.g. FCPF, CIFs), and some nationally established funds. The share of pledges in the early established Least Developed Countries Fund (LDCF) and the Special Climate Change Fund (SCCF) is close to 20%; whereas the role in the CIFs is closer to 30%; and a more significant share is present in REDD+ funds (i.e. UN-REDD, Amazon Fund). Although the climate funds have their own decision-making processes, high levels of contribution provide Nordic countries an influential role. For example, Sweden, Denmark and Norway are members of all the Climate Investment Funds Trust Fund Sub-

Committees, which decide funding allocations (Halonen et al., 2017).

Through their close engagement with these institutions, the Nordic countries have very detailed and up to date information on strategic priorities going forward, and emerging pipelines of projects. There would seem a very strong case for NDF to link to these networks in pursuit of its own strategic objectives. Given the bilateral nature of Nordic countries' engagement, this would be best pursued by NDF liaising with governments individually. Norway's pre-eminent role in forest-related funds, for example, would seem to offer the basis for a discussion on the potential for new business models linked to Sustainable Forest Management (SFM) with both mitigation and adaptation potential.

Going forward, the Green Climate Fund (GCF) may become an important NDF partner. How important it could depend on how the GCF itself evolves, however, and this is somewhat uncertain at the current time. Negotiations on GCF's replenishment will conclude in autumn of 2019. It would make sense to explore the merits of seeking closer GCF links at this point.

5.2.5. Knowledge and capacity building

NDF's work on capacity building adds value, not least as these types of activities are becoming increasingly difficult to fund. Knowledge generating activities are most value-adding when they are mainstreamed into policy.

An important part of the Theory of Change for both NDF and NCF is to build knowledge and capacity on adaptation and mitigation. This happens in several ways:

1. NDF funds capacity building projects through TA grants. NDF's work on capacity building clearly adds value, not least as these types of activities are becoming increasingly difficult to fund. An example from our case studies is the grant provided as part of the GGF to train banks in risk management of green businesses. As well as improving prospects that the investees are able to achieve their objectives, this is also a useful risk management tool for NDF, in that it provides protection to their investments (e.g. Green Guarantee Facility). In the GGF (C88), NDF trained bank officials on assessing risk in green SME investments, increasing their capacity to make those investments. A second example is NDF support to build the capacity of the Vietnamese government and the cement sector (C34) to oversee the management of more environmentally efficient cement production. Although it was difficult to obtain information on the impact of the project because of access issues, aiming for policy-level or structural change is potentially very valuable if successfully implemented.

Knowledge generation and dissemination also adds value and is particularly valuable when mainstreamed into public policy (see ESCI and PAGRICC case studies).

2. NDF (and especially NCF) funds risky, early stage ventures, or feasibility studies with a higher potential for failure than others are willing to tolerate, but which have significant knowledge and capacity generation potential. Whilst not all projects are of this kind, there are very positive examples such as WACA.

3. NDF and NCF see themselves as contributing to the sum of knowledge on climate finance. Failure as well as success has value. In some case, a technology or business model simply does not work as envisaged. In others, a project could succeed or fail, depending on how well it is designed and implemented, and the environment in which it takes place. NDF support for project preparation is valuable in this regard, but so too is the fact that almost three quarters of its equity investments and loans to date have been supported with grant finance.

Learning is most valuable when lessons are shared internally and externally, but NDF's ability to manage knowledge is hampered by a lack of data on project impact. It is also not clear to the evaluation team that discussion of failure is commonplace with NDF, and it was sometimes difficult to draw staff on questions of failure or areas of weakness within both NDF and NCF. The need to tell a positive story (even in the context of an internally commissioned evaluation such as the NCF one) may be a barrier to understanding this better. These points will be returned to in the recommendations Chapter 6.

5.2.6. Nordic identity

NDF does not have a particularly Nordic element to its activities. The concept of 'Nordic interest' is understood very differently by different actors, but has the potential to be a powerful asset to NDF if defined and implemented carefully.

Having considered the other ways that NDF could be additional, the final part of this section concerns its Nordic identity. While NDF projects are supposed to exhibit some element of 'Nordic interest' there is some confusion over what this means in practice. The Guidelines for Project Identification and Screening describe this as: "*Support for Nordic development policy priorities, including support for sectors or activities in which Nordic companies or institutions have particular expertise*" (NDF, 2016, p. 10). Several types of Nordic interest are covered in the Final Board Consideration Report. For example:

- Project reflects Nordic development objectives/climate objectives
- Project provides or could potentially provide business opportunities to Nordic actors given their comparative advantage
- Project advances Nordic business competence or development cooperation competence
- Project could provide employment opportunities for Nordic experts
- Project could provide opportunities for cooperation with other Nordic institutions
- Project is in line with Nordic interests in particular developing countries

Thus 'Nordic interest' could mean projects are supportive of Nordic policy on climate change/gender or development, of benefit to Nordic business/economies, or both. Internal discussions with NDF, and interviews with Nordic actors found different views on how this should be interpreted. Some stressed the commercial benefits to Nordic countries, but only where they had a comparative advantage and could bring valuable technology, know-how or investment. As discussed previously, this was the original rationale for NCF, and has regained prominence in NCF's new strategy.

Beyond the specifics of particular institutions, the Nordic economies are very successful internationally and have much to offer. Facilitating increased interaction is additional in that only a Nordic institution could do this, and NDF is particularly well placed to play this role given its pan-Nordic status.

A related but larger point made by a number of interviewees was the strength of the 'Nordic model' of social and economic development. Nordic countries perform very well in international comparisons of living standards and well-being and are characterized by low levels of inequality and high-quality public services. They are often cited as the example to which other countries should aspire. As well as the commercial elements, perhaps the core of the 'Nordic model' is its successful blend of public and private sectors. When considering where a Nordic institution such as NDF could be most additional in the future, it is important to ask where Nordic countries have a comparative advantage. For most people in other countries, the answer would be the Nordic Model itself.

Taken together, this suggests that NDF's Nordic identity is a unique source of potential comparative advantage that is not being fully exploited. A number of actors argued in interview that NDF's Nordic identify was a key source of advantage in terms of a) links to Nordic firms with valuable technology, b) shared values amongst Nordic countries in terms of environmental and social issues, and c) the potential to integrate the 'Nordic model' of development, or elements of it, into its activities."

The Nordic element is more tangible for NCF than the rest of NDF because of the criterion to have a Nordic lead. Staff told us in interviews that it is their perception that the Nordic element reduces transaction costs, as countries share languages (or familiarities with each other's languages), cultures and institutional norms, and this point was echoed by Nordic partners with which we spoke. By comparison, it is more cost intensive to manage a global application process and global partnerships.

5.3. NCF-specific findings

This section provides an overview of the main findings from the NCF evaluation and summarises findings in three areas: (i) the marketing of NCF calls, application process and implementation; (ii) NCF's institutional links with NDF; and (iii) the outcomes achieved by NCF.

5.3.1. Marketing, application process and implementation

NCF has ongoing support needs, especially in relation to marketing and M&E. Existing staff are too stretched to address these adequately.

Although there is room for improvement, NCF's approach to marketing, applications, selection and implementation is generally well-received by partners. There was praise for staff in interviews and high levels of satisfaction with the fund amongst colleagues and partners (especially in the most recent rounds). Amongst survey respondents, the area where there is least satisfaction is 'M&E'. However, there is evidence that partners confuse this term with other kinds of information gathering (timesheets, finance etc.). Partners tend to find this onerous, irrespective of location and round of funding. When explored in interviews, partners told us that whilst they knew that data was required by NCF, they were puzzled by the level of detail required for some areas, such as hourly reporting of staff time.

Partners and staff all thought that the facility could be better marketed, but staff are limited by the availability of time and resources to support it. Internationally, NCF has a good reputation where it is known, but there is potential to be more active in this regard. In interviews, several international climate finance experts told us they had not heard of NCF, which suggests visibility is limited in some key quarters. A leading international expert on challenge fund-type approaches to climate issues suggested that NCF could be better integrated with these networks, particularly as they have considerable learning to share given the length of time they have been in operation.

In general, across all areas of questioning, there was an improvement in partner perceptions of NCF in later rounds. This may reflect improved reforms to processes in 7/8 but could also be because respondents from rounds 5/6 have more experience in project implementation and the project cycle.

5.3.2. Institutional findings – NDF/NCF complementarity

NCF colleagues are valued by NDF staff, and the facility is considered important in enabling NDF to achieve its mandate.

This is especially important for private sector development and the Nordic element, which NCF can address more directly than NDF. NCF also seems to be more systematic in its inclusion of gender mainstreaming. Although NCF receives a lot of institutional support from NDF, and values this, the facility has additional ongoing support needs, especially in relation to marketing and M&E. Existing staff are too stretched to address these adequately and there may also be issues with an absence of specialist skills in these fields within the existing team. A case was made for calculating the full cost to NDF of supporting NCF, as the existing overhead was thought not to be recovering the full cost.

It was also reported that NCF could be more connected to NDF, and apart from consuming in-house resource, was somewhat standalone. This is not simply about being collegiate but about there being formal mechanisms for NCF and NDF to work more closely (e.g. via a continuation window for NCF projects to obtain NDF lending). This would deal with issues like competition between the two entities, which was raised as an issue. It is unusual, for example, that NCF has developed its own performance management system that is not well-integrated with NDF (of which NCF would be a subset). Whilst NCF may require some of its own separate indicators, ideally these should also be working towards the same high-level indicators of NDF. This is discussed more fully in the recommendations.

5.3.3. NCF specific outcomes

A key weakness in the previous rounds (5/6) was a lack of focus on commercial viability, but NCF has implemented reforms and doubled its efforts to take account of this.

NCF has 5 key objectives: (i) increase low-income countries' capacity to mitigate and adapt to climate change; (ii) encourage and promote innovation in areas susceptible to climate change; (iii) build partnerships between Nordic and partner country actors, both private and public organisations; (iv) contribute to sustainable development and the reduction of poverty; and (v) leverage additional financing for climate action. As we can see in the ToC, this is achieved by four main activities:

1. Designing and marketing the call
2. Project monitoring
3. Capacity-building support
4. Management of knowledge on climate investments.

In the medium term, the aim is for commercially viable climate solutions to be replicated and/or scaled-up, though this may also involve governments or other actors funding some ongoing cost of delivering the product/service/solution. Longer term, NCF funded projects should create jobs, promote private sector development and gender equality, tackle climate change and create more climate resilient communities, as well as contribute to a range of other SDGs.

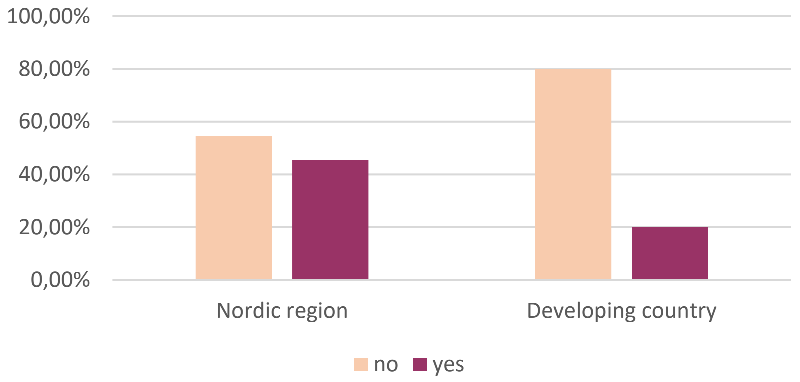
There is a clear need for the type of finance that NCF provides – i.e. a large gap for early stage climate-related innovation, especially adaptation

On financial additionality, our research with partners and findings from the wider NDF evaluation identify a need for the small-scale grant finance NCF provides. In many cases, we find that without NCF funding projects would a) not have gone ahead, b) been delayed, or c) been implemented in a different way. Across both rounds, about 20% of respondents had applied unsuccessfully for finance prior to the NCF application (n=8). In terms of alternative financing, about half said that it was 'somewhat likely they could have gotten financing elsewhere', whereas none said it was highly likely and one partner selected 'likely'. A further 43.5% said it was not at all likely the initiative would have gone ahead without NCF financing. This points to a reasonable amount of input additionality.

In interviews, most participants described a very constrained financial market. Although some could have accessed other financiers, they also described fundraising as hugely time consuming and challenging. A core value of receiving the NCF grant for one interviewee is that it allowed the possibility to focus on developing the venture rather than spending all the time on fundraising. For those that were optimistic about alternative finance, however, very high interest rates were highlighted. More than one interviewee had used NCF funding to secure match funding from elsewhere, including a private equity firm in one case.

In calls 7-9 the focus on replicability and commercial viability was enhanced to increase the chances that projects will operate at scale. As the ToC shows, this is an enabler/requirement of all the long-term outcomes that NCF hopes to achieve. Projects in 5/6 were asked if they had leveraged any additional funding. Less than 40% had received additional funding (n=6), totalling about EUR 700,000. Nordic partners were twice as likely to leverage funding as developing country partners (see Figure 9).

Figure 9 Finance leveraged by country type



Source: Particip based on survey data

In addition, 67% of partners from rounds 5/6 identified the lack of continuation/follow-on funding as a current risk to their project. Given the importance of future investment to enable growth/replication and/or scaling up, these figures give an indication of the difficulties that NCF projects face. This points in part to a financing gap – something that NCF acknowledges. It also suggests that rounds 5/6 were not sufficiently focused on this issue in their selection of projects. One interviewee who represented an NGO told us it was never part of their plan, that they themselves are withdrawing from the project at close and that about 70/80% of the activities would continue following project close. This issue has been addressed in 7/8 and it remains to be seen whether this will lead to increased commercial viability.

A key weakness in the previous rounds (5/6) was a lack of focus on commercial viability, but NCF has implemented reforms and doubled its efforts to take account of this. Early evidence for this is promising. The portfolio has changed and there is high satisfaction with NCF in the latest rounds.

In order for scaling up to take place, projects need to first be viable. NCF considers four viabilities: technological, social, environmental and commercial. Partners from 5/6 were asked about progress in each of these areas. The most satisfaction was with environmental viability (88%). Applicants were also broadly satisfied with their progress with social and technological viability (80%,64%). There was least satisfaction with commercial viability (53%), although only a small proportion were fully dissatisfied.

While the evaluation team understands that only two projects have closed from rounds 5/6, and therefore that scale up and replication could not be expected to be observed yet, there are reasons to doubt how successful this will be. Most importantly, commercial viability was not previously focused on as closely as is now the case, and there were few private sector partners that were awarded NCF funding. For rounds 7/8, we can see encouraging signs in this regard, where the private sector is again a major partner and there is a greater emphasis on scaling up/replication and customer willingness to pay.

As discussed previously, there is evidence that NCF is adding value in terms of focus on gender and development outcomes in project design.

At the moment, it is not possible to say more about the impact these projects have achieved, as NCF has not historically monitored outcome indicators systematically. Although this has now begun to change, it is too early to draw any conclusions.

5.3.4. NCF as challenge fund

Although challenge funds lack a good evidence base, they remain popular in international development and NCF as it is currently structured is consistent with best practice.

Challenge funds continue to be a popular and widely used mechanism in international development. However, several authors note the weakness of the evidence base to support them (Pompa, 2013; Brain et al. 2014; Callan and Davies, 2013). Proponents consider them to be a transparent, flexible and cost-effective way of achieving a valuable public good (Chiver at al. 2006). However, according to Brain et al., despite the preponderance of reviews, it is "not possible to conclude with any confidence what has been the development impact of the public funds spent through challenge funds" (pp: 2014). Evaluations tend to be output-oriented and/or mainly comprise of grey, rather than academic literature. Copestake et al. (2013) conducted qualitative research into the positive impact of NGOs actions funded through civil society challenge funds (CSCF) and also found the empirical evidence to be weak. DfID's own evaluation of one of its funds found many positive examples of projects benefiting poor and marginalised people although it also concluded that it was "difficult to provide reliable disaggregated data on beneficiaries at portfolio level" (DfID, 2015, pp). In addition, Foley (1999) found that leverage from challenge funds has been no more successful than earlier non-competitive initiatives.

It should be remembered that a challenge fund is just a means by which funding is being disbursed, and it is unsurprising that it is difficult to find additional benefits from using them (compared with giving straight grants for example). To illustrate this further, let us assume that two identical projects were funded by the same sum, one via a straight grant and one via a challenge fund. For a challenge fund to be additional, it would need to be able to show that the method of disbursement added value over and above the funding itself. One might reasonably argue that a challenge fund encourages innovation and a more diverse set of applicants, but this is empirically very hard to demonstrate.

In interviews, a number of participants were sceptical of the additional benefits of the challenge fund model, some pointing to the weak evidence base described here. However, interviewees were also able to disentangle this from NCF, seeing merit in the fund rather than the challenge fund element per se. International best practice on how to structure challenge funds supports this positive perception, with NCF being currently structured in ways that are consistent with this guidance, including grant size, providing technical assistance, number of rounds and openings, and project duration (Pompa, 2013). Partners report positively on the challenge fund element and believe that it promotes innovation, private sector development and local solutions. Again, however, the perception is notably more positive for 7/8 than 5/6. Partners with experiences in other kinds of challenge funds told us that NCF compares favourably with the exception of the higher level of detail required for project monitoring.

6. Recommendations for the future

This section provides recommendations on the future priorities for NDF – i.e. Evaluation Questions 3 and 4, as well as NCF-specific recommendations. The findings from EQ1 and EQ2 which assessed the past performance of NDF in terms of the delivery of its mandate and its value-added internationally are a key input to the forward-looking aspect of the evaluation. In addition, our findings and conclusions below are informed by interviews with partners and key informants.

The chapters on EQ3 and EQ4 start with the recommendations and are then underpinned with the corresponding conclusions and findings.

6.1 What should the key priorities be to strengthen NDF's added value and comparative advantage? (EQ3)

We find that NDF's current value generation is at risk in a number of areas and conclude that NDF's future value generation could be increased if a more focused, strategic and evidence-based approach was taken.

<u>Based on this, we recommend NDF to mitigate the risks to its current value creation by:</u>

- Undertaking, or commissioning, research into the aspects of adaptation that are most suited to new private-sector solutions, focusing on developing a niche in these areas, and disseminating findings to the wider adaptation community (section 0). Seeking innovative, private-sector business models to address adaptation challenges is essential, but not all issues are amenable to these types of solutions. The risk is that scarce resources are wasted looking for solutions where they are unlikely to work rather than concentrating on those where they might (expert interview evidence) (see chapter 5.2.2.).

- **Identifying and maintaining the level of concessionality they wish to maintain across the portfolio, with a minimum level of grant-equivalent financing. The level of concessionality used should be approached more systematically than is currently the case. The IFC's 'cascade' system offers an interesting example of how this can be done. Given the value and scarcity of concessional finance internationally, we recommend NDF maintains a minimum of 50% of grant-equivalent financing across its portfolio, and there is a case for holding this at 75%.** (section 0) Providing financing with varying degrees of concessionality is valuable if that financing is correctly tailored to the project. The risk is that NDF faces incentives to reduce the degree of concessionality they deploy, separately from project needs (partner interview evidence) (section 5.2.3).
- **Ensuring investments designed to catalyse future financing are genuinely 'first-mover' and that alternative financing is not available elsewhere. (section 5.2.3)** NDF can catalyse investment by acting as an anchor investor (e.g. rAREH), but the risk is that it invests at a later stage when the catalytic effects are less clear (e.g. Climate Investor 1) or provide follow-on financing to existing investees that would perhaps have obtained funding from elsewhere (e.g. Green Guarantee Facility) (see section 5.1.5).
- **Being proactive with partners in identifying new areas, initiating projects and bringing together new actors (e.g. MDBs and private sector)** (section 5.2.4. and 0.)
- **Do not always abandon 'boring' activities in favour of innovation. Assess projects in terms of their potential impact** (see below and 0.). Some things that NDF does, such as capacity building, are 'boring' but valuable. The risk is that NDF focuses so much on the new and innovative, that these activities, and the added-value they generate, are threatened (section 5.2.5).
- **Ensure staffing levels are sufficient to effectively manage project workload.** While NDF may well 'punch above its weight' the current workload appears to be unsustainable. A core strength of NDF is the quality of its staff, and a major

risk is that the pressure of work they face, and high demand for their services, makes it impossible to retain them (section 5.2.3).

NDF should increase its value-added by:

- **Developing a focused strategy around a small set of intervention types based on its comparative advantage and analysis of need and potential impact** (section 0). For example, NDF has a fixed group of focus countries, which can make it difficult for them to collaborate on certain projects (partner interview evidence). The fixed focus does not allow for flexibility when country needs change (section 0).
- NDF's Nordic identity could be leveraged to increase its value-added internationally (section 5.2.6). This is developed in response to the final evaluation question (section 0) that explicitly addresses the Nordic aspect of NDF's future strategy.
- **Developing a coherent theory of change to deliver this strategy, including the role of NCF and similar facilities. We provide recommendations to inform this process of ToC development** (see also section 0). This recommendation is based on the finding that NDF has not used an explicit ToC approach in the past, although it is underpinned by an implicit ToC (section 4.1) This has limits in terms of guiding and focusing NDF's activities, including the role that NCF could play.
- **Establish a dedicated lending window to provide follow-on funding for NCF (and other incubator-type facilities) (section 6.1.4).** NCF is not well integrated with NDF (section 5.3.2.).
- **Continue partnerships with MDBs and private sector, but ensure these are additional not passive (section 6.1.5.).** NDF can add value through bringing partners to a new area, and/or influencing their existing activities. This is true of both its long-standing MDB partners, and newer partnerships, including with private partners. The risk is that NDF follows rather than leads, undermining this potential. Being 'flexible' is not always a good thing (section 5.2.4).

- **Explore the value of partnering with new actors such as US Foundations working on 'Catalytic Capital', as well as climate institutions such as the Green Climate Fund** (section 0). NDF is not well known outside its immediate networks and partners. This is partly due to a long-standing 'insider strategy', working largely with MDBs behind closed doors. While valuable, NDF could increase impact in some areas through developing new partnerships. NDF's low visibility also relates to capacity. Staff do not have the time to project NDF internationally as others do (section 5.2.4).

The following sub-chapters present more details on recommendations related to this fourth evaluation question.

Theory of change, focus and strategy

NDF has not previously used an explicit ToC-approach to guide its decision-making and approach to measurement, although as with any change organisation it is underpinned by an implicit ToC. As discussed previously, NDF is engaged in a wide range of activities. A key recommendation is for NDF to use a process of strategy renewal/prioritisation informed by the ToC approach, and the findings of this evaluation, to focus activities. We are not suggesting that the ToC presented should be taken forward by NDF. It is the evaluation team's attempt to surface the ToC for the purposes of this evaluation, i.e. to test the assumptions underpinning what NDF currently does, not what it should do in the future.

A clearer direction in terms of strategy from NDF's owners and Board would enable a more focused, coherent theory of change and provide clearer direction to the management. This would allow any areas of disagreement to be discussed openly, and agreement to be reached on a clear way forward for NDF. The process of ToC development/prioritisation would also support the identifications of indicators and should be closely aligned with the development of an M&E system.

Best practice is to use evidence to inform ToC development, and NDF's limited evidence base is a challenge in this regard. Each of the areas examined during the case analysis has a large, and often complex literature. There are different forms of impact for different stakeholders, and trade-offs between these need to be understood and taken careful account of when taking investment decisions.

In our view, undertaking this process is the best way of determining what the 'key priorities' should be to 'strengthen NDF's added value and comparative advantage' (i.e. EQ3). Drawing on the findings of the evaluation, the remainder of this section provides recommendations to inform this process of ToC development. This is organised around four questions i) what should NDF do? ii) where should NDF work? iii) how should NDF work? and iv) who should NDF work with?

What should NDF do?

As described above, NDF's increased focus on adaptation makes sense. Within this, there may be a need to focus further, however. Adaptation to climate change, if defined broadly enough, becomes synonymous with, and indistinguishable from, general development. Identifying particular forms of adaptation and focusing more on these is important if NDF is to build the knowledge needed to help unlock seemingly intractable problems. This is particularly important given the need to find new business models. Understanding what models might be useful and viable in the agricultural sector is completely different to looking at water resources or coastal defences. Given NDF's increasing expertise with private sector and adaptation, we recommend building upon this to understand more systematically which types of adaptation are potentially suited to private sector solutions and which are not. As well as guiding NDF's decision-making, this would have significant value for the wider adaptation community.

As discussed further below, it would also make sense to identify priority areas with Nordic governments, and then use these as a basis for developing theories of change (ToC) of how these goals should be achieved. Linking to impact and M&E is also key.

Here and elsewhere, it is important not to overemphasise innovative solutions. In some cases, solutions are well known, and the problem is implementation. The goal should be to remove barriers, rather than necessarily come up with alternatives. A good example is public sector capacity building using TA. In NDF's focus countries, the capacity and quality of policy design and implementation is a fundamental precondition for what it is trying to achieve. As highlighted in our interviews, however, this is a deeply unfashionable type of activity that donor agencies are increasingly reluctant to fund. When thinking about funding gaps, therefore, NDF should not ignore problems just because they are long-standing, and perhaps less interesting to work on than more novel, innovative topics.

Where should NDF work?

NDF has a fixed group of focus countries. There is obvious value in committing to the same countries for the long-term, as this enables knowledge to be developed over time, informing and improving decision-making. At the same time, NDF does not have any in-country presence, so this is less important than it could be. A number of MDB interviewees also argued that NDF's limited country focus made it difficult for them to work together on certain projects. There would appear to be a case for some flexibility, not least as circumstances change. As was pointed out for Latin America, for example, 2 of NDF's focus countries are very difficult to work in due to political conditions, and impossible to pursue private sector development effectively. At the same time, the crisis in Venezuela is creating acute needs. Being able to change focus countries would seem to make sense. A further issue here is a discrepancy between where NCF and NDF work. We were told that this was confusing for investees and the rationale for this was not understood by staff. Again, linking to assessment of potential impact could address this issue – ensuring focus countries are those where potential impact is greatest, taking account of a range of factors, would allow some stability but also the possibility of change.

As well as country need, NDF's own experience and accumulated knowledge is an important part of its comparative advantage, which should influence country choice to maximise impact. The same is true of the partners with which it works. Currently links between NDF and bilateral donor agencies of the Nordic countries is quite limited. This is an obvious area of potential. Focusing on countries with a strong Nordic development presence would be an important first step in realizing this potential and should be one of the criteria to include when considering impact potential.

How should NDF work?

There is a good case for continuing the use of non-grant instruments as they meet an important need and allow operational flexibility. At the same time, the value of grants is clear, particularly as they are becoming increasingly scarce. The ability to select and mix instruments to suit project needs is also valuable, but there may be a danger of increasing risk aversion. The risk is that NDF faces incentives to reduce the degree of concessionality they deploy, separately from project needs (partner interview evidence). One way of addressing this would be to stipulate a minimum level of risk across the portfolio. Another would be to approach the question more systematically and develop a framework for objectively assessing the degree of concessionality that is appropriate and necessary in a given context. The IFC's 'Cascade' approach is an interesting model in this regard that could be looked at, though it would be advisable to design a bespoke system that matched NDF's priorities and structure. These questions are all central to future discussions on the ToC and strategy that we are advocating.

A second issue concerns modes of project delivery. As described in the findings chapter, NCF is a well-respected facility that is aligned with international best practice on how to operate a challenge fund. It has refocused in recent years to focus more on private sector development and being an incubator for small enterprises that may grow, replicate or scale-up. This kind of innovation is essential, but three questions arise. First, is NCF currently operating as well as it could, and will recent changes to its operations be effective? Second, is there sufficient complementarity between NCF and NDF? Third, if this is the case, is NDF the right institution to house this facility? The first of these questions will be addressed in the NCF findings below. For the second, while NCF is clearly aligned with NDF's mandate and a special vehicle for certain objectives like Nordic interest, our findings show that NDF is already well-aligned with its mandate and deeper alignment if required could arguably be achieved by other means. It is also clear that NCF is less connected to NDF than it could be. NCF is certainly not an incubator for projects that goes on to receive NDF funding. A suggestion made by both NDF and NCF staff was to create a dedicated lending window for former NCF projects. This makes sense in our view.

The third question on NCF (which also applies to EEP) is whether NDF is the right organization to host these types of facilities. The answer depends on the points raised above. If NCF remains quite unconnected to the other things NDF does, there does not seem to be a rationale for it being based in NDF. On the other hand, if things were connected such that NCF projects could graduate to NDF funding, bringing new ideas and technologies which could then be scaled up, the rationale is clear. The same is true of EEP, or indeed any other facility that NDF decides to initiate. This only makes sense if it is integral to what NDF is trying to achieve – i.e. it is a core element of NDF's ToC. Again, the future discussions on this should flush out these issues.

Who should NDF work with?

NDF has developed an enviable relationship with the MDBs, which other agencies do not have. NDF can add significant value through its influence on the MDBs, but this is not always the case, particularly where it is a relatively passive partner. In the case study ESCI, for instance, funds were handled by IDB and NDF's influence was limited. In the PAGRICC case study, NDF had more influence over project design and implementation due to its direct involvement. NDF has the potential to influence what the MDBs do positively and persuade them to do new things they otherwise would not. MDBs should continue to be a core partner but should approach joint projects more selectively. Helping to build a strong project pipelines and influencing the nature of these projects according to NDF's priorities, seems a particularly fruitful type of activity, as does using grant financing to test the feasibility of new types of interventions, and build capacity for these.

Currently NDF visits each MDB at least twice a year. This is a major commitment of resources. Though valued by the MDBs, it may be worth considering alternatives. An NDF staff member was previously seconded to the ADB, for example, and this was apparently very effective in developing major joint projects. While it is not feasible or desirable to have an NDF staff member permanently in each MDB, some form of rotating secondment might work well. As well as allowing greater time to explore partnership opportunities, this would also enable lessons from different regional MDBs to be transferred and give NDF greater scope to identify and initiate projects in priority areas. NDF needs to take a more robust line with larger partners on access to data and the identification of indicator sets. A longer-term presence within MDBs might also improve cooperation in key areas like this.

At the same time, there is clear value in working with other partners, both with the MDBs in multi-donor structures, but also independently. The private sector has much to contribute and is essential if the SDGs are to be achieved. Working strategically to catalyse innovation on new business models and mobilise private investment through well-structured vehicles are good potential areas for collaboration. NDF has already developed a reputation as expert in private sector adaptation financing. Over time this will deepen, increasing the impact that can be achieved. The more NDF focuses on specific priority areas within the adaptation space, the easier this will be.

As well as the MDBs, NDF should seek to partner with other climate finance and 'catalytic capital' actors. For the latter, the Catalytic Capital Consortium, comprised of the MacArthur and Rockefeller Foundations, and the Omidyar Network, is actively exploring how to use concessional finance of various forms to mobilise private investment. Many of the areas of focus are highly aligned with those of NDF. As well as learning from the Consortium, NDF has much to offer from its own growing experience of how different forms of non-grant, concessional finance can stimulate private investment in developing countries. NDF does partner with well-established climate finance institutions such as the GEF, but there would appear to be scope for greater collaboration. As described above, Nordic countries' bilateral engagement with climate finance institutions, and the detailed knowledge this brings over potential linkages, creates significant potential for collaboration, which would need to be explored bilaterally with individual Nordic governments.

Working with the GCF requires accreditation, which is a sensible longer-term objective and should be assessed on a cost-benefit basis once the current replenishment round is finalised. In the medium-term, it may be possible to commence partnerships by working with organisations that are already accredited. NEFCO is the obvious candidate here, and more broadly, we would recommend discussing the potential to establish a joint venture with NEFCO that builds on both its own and NDF's mutual strengths.

There is a good case for closer links with Nordic DFIs given overlapping interests and complementary skills. Our preliminary mapping suggests that Norfund and Finnfund may have the greatest potential in this respect, but potential links would obviously have to be explored in detail. There may also be potential to work more closely with Swedfund, where health is a new priority sector, which has also been identified by NDF as an area where they would like to do more work.

More generally, the case for greater cooperation with Nordic development institutions is clear. NDF is outside the scope of the national ministries that manage development and climate policy in Nordic countries. As a pan-Nordic institution, it appears not to be on the 'radar' of these institutions, including embassies and bilateral agencies in the countries in which they operate. Addressing this is essential in our view.

M&E recommendations

Evaluation should serve two important purposes: proving *and* improving. One observation we have on both NDF and NCF's approach to date is that there is an over-emphasis on the former - using 'results' to promote and market NDF's work - and not enough emphasis on the latter – the valuable lessons that can be learned about what does and does not work. This is especially important for an organisation like NDF that is trying new things. Not all knowledge needs to come directly from projects. NDF could, as discussed, invest in research to support its knowledge base such as in private sector models for adaptation, or ways of measuring the social benefits of renewable energy. As well as supporting NDF's work they would add value to the sector and would not require large amounts of investment. It is entirely understandable that in an environment where there is pressure to demonstrate impact quickly, glossy reports using the language of impact are opted for. This is tacitly encouraged by the wider environment where the quality of measurement is often low. This may also be the case inadvertently with owners who don't always have an incentive to probe on issues of additionality or request that more robust ToCs and outcomes monitoring are built into board reports. Our headline recommendation is to move away from anecdotal and output-oriented measurement and to invest properly in what is required to have a system that is fit for purpose.

In this section, we provide recommendations on the general approach that could be adopted and some specifics on what should be measured.

Measurement approach

We have recommended a strategic planning process that begins with developing a ToC for NDF (or several sectoral ToCs, whichever is more practical). Once this process is complete, we would suggest a limited number of focused indicators to track the most significant outcomes. A common approach is to identify a small number of core indicators that all projects report on and a larger number of peripheral indicators selected on a case-by-case basis. This ensures systematic gathering of key metrics, but also provides flexibility to allow project officers to select indicators that are suitable for their projects. In some instances, NDF may be able to support the gathering of data directly e.g. through TA grants. In others, the aim would be to either contract on the basis that data is collected on their behalf, or request partners add indicators to what they are already collecting.

Three principles are relevant in indicator selection. First, they should be **'necessary and sufficient'**. Each indicator should be necessary and - as a whole - the set should be sufficient to measure change for the activities of that group. Second, they should **'measure what matters'**. It is important not to just measure what is easy to measure, even if this is the approach taken by partners and competitors. It is preferable to invest in gathering important information if it is material to improving the quality of NDF investments. Third, they should be **material to NDF investments**. Each indicator should provide information without which the value of the investment would not be clear. This parsimonious approach ensures that only the most significant pieces of information are being requested from projects, reducing the administrative burden.

To operationalise the proposed approach, NDF needs more internal M&E expertise. We are conscious that staff are already overworked, and that outcomes measurement would require additional investment of time and energy. However, given the need for NDF to be able to communicate the impact of its work to its owners, the Nordic public and other stakeholders, this should be prioritised. For an organisation of its size it is unusual not to have at least one member of staff with M&E as a specialism. A common rule of thumb for development or social interventions is that 5-10% of operational budgets should be spent on evaluation. Whilst this might not be practical, and NDF could achieve substantial improvements without spending these sums, it does highlight the low level of current investment. There is a balance to be struck between the utility of M&E and the investment required to achieve it. The emphasis should be on gathering 'just enough' data to inform decision-making and support continuous improvement.

As well as overseeing the development of the in-house system, an M&E specialist staff member could commission external evaluations and liaise with partners to ensure outcomes data are being accurately captured. NDF could also benefit from improving the way it manages the knowledge that it already holds. All evaluations and guidance materials could be hosted on a microsite specific to NDF, for example, providing a 'one stop' resource hub. This could improve consistency of measurement and reporting, including the way results are communicated to the board.

Measurement content

As there is a lot of overlap between the projects that NDF funds (which may increase as part of a more focused strategy), there is scope for developing indicator sets for each project 'type'. This may result in a number of 'buckets', with each holding perhaps five or six indicators, and some cross-cutting indicators for overlapping projects. While we understand NDF's holistic approach, many projects do have a core focus. It would make sense for dedicated indicators to seek to capture these, complemented by cross-cutting indicators. One option would be to align with the SDGs, another to build upon what NDF already does, organising around projects with distinctive theories of change. A potential list of buckets might be:

- Renewable energy (with sub-indicators for on-grid/off-grid and other)
- Infrastructure
- Water, sanitation, food and waste
- Cities
- Finance
- Natural resources
- Private sector development

To illustrate what we have in mind,
Table 12 gives example output and outcome indicators for on-grid energy.

Table 12 Example of output and outcome indicators for on-grid energy

Output indicators	Outcome indicators
Homes reached with solar kits	Change in volume of electricity used
Number of school-going children	Change in appliances used
Number of health centres/schools reached	Change in productive uses of electricity (disaggregated for women)
Number of direct businesses reached	Change in household income
Number of indirect businesses reached	• Change in net savings (kerosene/diesel less installation costs) • Change in black carbon emissions • Change in carbon emissions • Change in time spent studying and grades • Change in productivity of health centres • Change in productivity of businesses (indirect) • Change in carbon emissions • Change in time spent studying and grades

Following the 'core and peripheral' indicators approach, those chosen would vary depending on the nature of the project and the priorities for that investment. It is also advisable to use plausible assumptions to make 'good enough' estimations.

We recommend NDF embarks on a new approach to impact measurement, which creates the potential to do something fresh and ambitious that sets the standard for other investors. Given the limited time and action-oriented nature of its work, the focus should be on continuous improvement where results are being responded to as and when new information becomes available. We have tested the SROI approach as a way to examine these issues and would recommend that this and other approaches are explored further to improve the evidence base for NDF.

Recommendations on future funding of NDF

In this report, a number of recommendations have been made for how NDF could improve the way that it works. While all are important, the need to develop a more focused strategy that is complementary to the related activities of their owner countries and design a measurement system to capture the impacts of this robustly are the key recommendations. If NDF takes these recommendations on board, and is given the support needed to implement them, we would recommend a new tranche of funding. In our view, NDF performs a valuable role already and is developing a genuine niche in the climate finance architecture. The recommendations above are therefore designed to help NDF to enhance the impacts it achieves in the future.

As we know, NDF's financial situation will start to deteriorate steadily from 2021, with its capital base eroded and reflows from historical loans insufficient to meet current disbursement levels of around EUR 50 mn per year. In these circumstances, NDF will have to reduce its activities progressively in line with reflows or obtain additional financing.

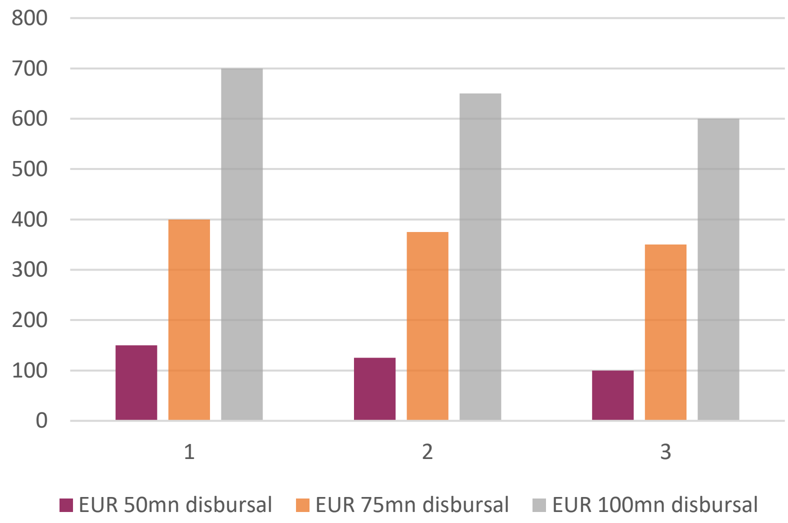
One option would be to borrow to fund its activities. A second would be to establish trust funds to manage the funds of other actors. In our view, there is not a good case for either option. As we have seen, NDF has an unusual degree of flexibility in the instruments it uses, particularly the mix of grants and non-grants. If either option were pursued, this flexibility would be greatly reduced or eliminated. The need to service debt would mean that NDF could no longer use grants to the degree it does today, and potentially not at all. All of NDF's partners attest to the importance of its capacity to use concessional finance. If NDF were to manage funds for other actors, it would clearly be required to do so within the terms of a particular mandate, which would presumably differ from what NDF currently does. Numerous partners highlighted NDF's ability to innovate, try new things and adapt to changing circumstances. Managing money for others through dedicated trust funds would clearly restrict this.

A final point is that NDF has no experience in either of these activities. No doubt this could be acquired, but it seems much more sensible to build upon the strengths that NDF currently has, rather than abandon these and seek to acquire others.

These leaves two options. First, NDF could be closed down. While it could continue for many years, disbursing less and less funds each year, there is little point in doing this in our view. If there is not the political commitment to support NDF going forward, the best approach would be to close it now. The second option is for NDF's owners to provide the political commitment that is needed, agree to fund NDF, and actively participate in the changes required for NDF to realise it's very large potential as a Nordic climate and development financing institution.

If additional funding is approved, the questions arise as to what level and form of financing would be most appropriate. Figure 10 sets out the options in this regard.

Figure 10 NDF funding scenarios 2021-2031 (EUR mn)



Source: Author's own analysis based on data provided by NDF

The level of funding that NDF needs depends on how much finance it disburses annually, and the nature of that financing. Figure 10 compares three core scenarios, with three variants of each. The scenarios differ in two ways: the balance of grants and non-grants that NDF disburses; and the amount of annual disbursals. All the scenarios focus on a ten-year period from 2021-31.

The blue bars depict the status quo, where NDF continues to disburse around EUR 50mn annually. As we can see, the higher the proportion of grants disbursed, the larger the financing required. For 75% grants, this would be EUR 150mn, falling to EUR 100mn if grants are only 25% of disbursed funds.

If NDF were to expand its operations, the level of funding needed in 2021 would rise accordingly. Were disbursals to increase to EUR 75mn per year, new funding of EUR 400mn would be needed with 75% grants, falling to EUR 350mn if only 25% of disbursals were in the form of grants. A larger expansion, where NDF would disburse EUR 100mn per year, would require new funding of EUR 700mn with grants at 75% of disbursals, falling to EUR 600mn with grants at 25% of disbursals.

We have also looked at the impact of how NDF is funded. The alternatives are concessional loans, straight capital replenishment, or some combination of the two. As we assume that concessional loans have a ten-year grace period, with repayments only beginning in 2031, the choice of financing makes no difference before then. After 2031, however, there are significant differences. As repayments on the concessional loans will deplete NDF's budget each year from this point on, NDF would require more refinancing in 2032 to maintain its operations. The larger the share of concessional loans in the 2021 financing mix, the larger the need for refinancing.

To summarise:

- The higher the share of grants in disbursals, the greater the 2021 financing requirement.
- The higher the level of annual disbursals, the greater the 2021 financing requirement.
- The higher the level of concessional loans in the 2021 financing agreement relative to straight capital replenishment, the higher the 2032 financing round would need to be to maintain operations.
- The higher the share of grants in disbursals, the higher the 2032 financing needs would be as future reflows would be lower.

If the goal was to provide the minimum possible financing in 2021, then NDF should increase its use of non-grants to 75% of disbursals, which should remain at EUR 50mn per year. This would require EUR 100mn of new financing. The goal, however, is presumably not to provide the minimum possible amount of finance, but rather to enable NDF to achieve the most impact that it can. In this regard, NDF's ability to use grant finance is a highly valuable asset, and one that many other institutions lack. We would therefore recommend that this flexibility is retained, with the proportion of grant financing in the portfolio remaining at least 50% and ideally 75%.

On annual disbursals, there is a case for expansion. A number of key partners argued that NDF could participate, and enable, a wider set of activities if the amount of financing it could commit increased. While some partners suggested a doubling of annual disbursals to EUR 100mn, an expansion of this size may be too much, and we would therefore recommend that NDF increases annual disbursements to EUR 75mn per year. If grants remain at 75% of disbursals, this would require new financing of EUR 400mn, compared to EUR 375mn if grants and non-grants each account for half of annual disbursals.

In our view, a ten-year cycle of refinancing of NDF makes sense. This allows sufficient time for the impact of the refocused strategy to be assessed, and changes made as appropriate. It also enables NDF's owners to revisit the strategy in the light of changes in the world and in their own priorities. Given this, it is not particularly important in our view whether the 2021 replenishment is a concessional loan or a grant, or some combination of the two. All these options will require a further round of financing in 10 years, and it seems unlikely that the decisive issue at this point will be whether concessional loans need to be serviced or not.

Having said that, a straight capital replenishment gives the greatest flexibility in terms of its potential use and avoiding the need to service loans in the future – even concessional loans – would give NDF more ability to absorb risk, which is an important part of its mandate and role.

6.2 Should the NDF play a different or wider role on behalf of the Nordic administrations, either through a broader climate change and development mandate or in other areas prioritised by the Nordic countries (EQ4)?

In short, the team's recommendations related to EQ4 can be summarised in the following points:

- NDF needs to become more integrated with its owner countries in order to understand their priorities, and for them to better understand NDF's strengths and weaknesses, as well as its potential.
- The proposed new strategy for NDF should be based upon the priorities of the Nordic countries, combined with areas of greatest comparative advantage as discussed above.
- An important part of this is coordination with other Nordic country (and multilateral) agencies, to complement each other's work and enhance impacts.
- There is a strong case for a more coordinated, coherent and ambitious Nordic approach to climate and development, which draws upon the strengths of the 'Nordic model' of development. NDF is well placed to help deliver this.
- The process of developing a strategy in conjunction with its country owners would be a valuable way of finding common ground amongst these countries and would help establish a stable political basis of support for NDF going forward.

This short section considers whether NDF should play a different or wider role on behalf of the Nordic administrations, either through a broader climate change and development mandate or in other areas prioritised by the Nordic countries.

In our view, the discussion on NDF's role to play is most clearly linked to the need for a more focused strategy. As well as being informed by the results of an improved M&E system over time, this strategy should also be based upon the evolving priorities of Nordic countries. As a starting point, we have suggested some areas we think NDF should focus. These are largely in line with its current approach, though we believe NDF should seek to increase understanding of the forms of adaptation that are most suited to new private sector business models, and specialise in these. If this was considered sensible, one option would be to spend some focused time in Nordic capitals individually to discuss priorities, perhaps followed by a workshop to agree on priorities and develop Theories of Change and operational processes to achieve these.

A period of discussion would be valuable in itself as well. A number of interviewees commented that NDF should spend less time flying to Washington and Manila, and more time in Nordic capitals. This does not need to be an either/or. The rotating MDB secondment we have suggested could free up more time for NDF to spend in the Nordic region, while also deepening its relationship with the MDBs.

Some important questions to address in the proposed consultation are:

1. Within the climate change and development space, what are the national priorities of Nordic countries for the next 5-10 years?
2. To what extent is there agreement between countries on these goals?
3. What existing and planned institutions, mechanisms and policies will pursue these goals?
4. How could NDF complement and strengthen these efforts in terms of its strategic focus?
5. What Theory of Change for NDF best reflects this strategic focus?
6. How should NDF be organised, staffed and governed to deliver on this ToC?
7. What could other Nordic institutions do to both help NDF deliver its objectives and support their own goals?
8. How should NDF's owners adjust their existing activities to reflect these changes and strengthen their ability to deliver their goals?

These are large questions but so are the challenges, and the potential of the Nordic countries to address them. Answering these questions collectively and operationalising these answers would be an important step in beginning to realise this potential.

6.3 NCF recommendations

The Future of NCF

We have identified a number of areas where NCF could increase the probability that the reforms it has made are successful over the longer-term and recommend:

- Projects should continue be tracked to assess whether they are achieving the outcomes set out in the ToC, particularly whether they are able to leverage continuation funding.
- Because NCF works directly with its beneficiaries, there was more opportunity to engage directly than for NDF. In our view, NCF has a great opportunity to collect good quality information from projects. The response rates to our surveys were high, and there was a lot of goodwill to cooperate and participate in interviews. Having said that, the most common criticism of NCF was the level of micro-reporting it requires from partners. We would recommend therefore, that NCF reviews the way it is collecting data with a view to rationalising it and focusing data 'asks' on the most important pieces of information. This should be fully aligned with the wider M&E recommendations for NDF.

Taking all these factors into consideration, we recommend postponing a decision on the future of NCF until such time as 7-9 have a chance to be implemented and the result of new reforms can be observed. A capital replenishment of NCF is due in late 2019, and there is no reason for this not to go ahead on the basis of the evidence we have found.

These recommendations are based on the following findings (see 5.3):

- There is a clear need for the type of finance that NCF provides – i.e. a large gap for early stage climate-related innovation, especially adaptation.
- Although challenge funds lack a good evidence base, they remain popular in international development and NCF as it is currently structured is consistent with best practice.
- A key weakness in the previous rounds was a lack of focus on commercial viability, but NCF has redoubled its efforts to take account of this.
- Early evidence for this is promising. The portfolio has changed and there is high satisfaction with NCF in the latest rounds.

Recommendations on other evaluation questions are below:

How should NCF operate?

We recommend the following:

- We recommend that NCF retains its existing structure and approach.
- NCF should have a greater connected with NDF and the wider climate finance field.
- NCF should access expertise on climate science and finance.
- NCF should participate/align with NDF strategy and refresh its ToC.

Recommendations are further specified below.

1. Retain existing structure and approach

Given the need to give 7-9 a chance to test the new approach, we would not recommend making further structural changes to NCF with the exception of addressing the monitoring issue discussed above. The way 7-9 has been structured is meeting with approval. In addition, NCF is happy with the quality of projects that have been initiated under 7-9. Any restructure would also be potentially distracting at this time when the priority should be given to good project implementation and more effective measurement.

The suggestion of a trust fund model or of widening the donor base may be worth considering. However, this would also be easier to do if or when NCF has a well-functioning 7-9 portfolio that is generating evidence of impact.

A final question on structure relates to the challenge fund element. Although challenge funds lack a good evidence base, this is not the same as evidence that challenge funds are ineffective. We simply do not have robust empirical evidence either way. In our view, the challenge fund element is a potentially effective way of delivering interventions, particularly if NCF stays abreast of the literature on best practice, remains responsive to partners and focuses on implementation and measurement of 7-9.

2. Greater connection with NDF and the wider climate finance field

In our view, NCF is less connected to NDF than is ideal, and NCF is certainly not an incubator for projects that go on to receive NDF funding. To address this, we recommend that NDF consider opening a dedicated lending window for former NCF projects. NCF also appears to be less connected to the wider challenge fund world than it could be. NDF is very involved with the Climate Finance Lab, for example, which crowdsources ideas, and is closely connected with other related approaches. As one of the longer-standing organisations to use this approach, NCF has much to offer in terms of accumulated learning. It could also learn from the experience of others of course.

3. Access expertise on climate science and finance

The selection of high-quality projects and partners has been identified as a key determinant of success for NCF. While NCF staff themselves are doing everything they can at present, both to market the calls and optimise project selection, the range of projects funded is very wide and diverse. Given the need to stay 'ahead of the curve' on innovation, it may be challenging for the current team to adequately evaluate applications and remain up to date on the climate science/finance/private sector development literatures. As such, there may be a case for involving a panel of external advisors more in the assessments of applications or partnering more formally with another institution that already has that capacity. Such a resource may also be beneficial to the wider NDF and its Board.

4. Measurement issues

Measurement issues have been addressed in detail for both NCF and NDF in the previous sub-section on M&E related recommendations in Chapter 6. We have two NCF-specific recommendations. The first is the wider overhaul of what it asks projects to collect with a clear eye to the trade-off between outcomes and other kinds of monitoring. Second, there was a change in NCF's reporting in 2017, when annual reports became glossier and more promotional. This is not necessarily a welcome development. As we discuss below, an over-reliance on anecdotal stories and beneficiary numbers can be distracting rather than informative. As NCF starts to collect data from 7-9 to assess the impact of these crucial changes, we would recommend a greater focus on using data for continuous improvement. Whilst we understand the wish to present a positive picture, our experience of working with NCF was of a reluctance to engage constructively with criticism. This is problematic for a learning organisation that should see knowledge management as a key part of good reflective practice that informs the way they work.

5. Participate/align with NDF strategy/ToC refresh

The need for NDF to refresh its strategy and refocus its ToC is highly relevant to NCF. As part of this process, we recommend that NDF identify the level of risk it is prepared to accept across its portfolio. For NCF, a similar process is required where it identifies the ratio of project successes to failures. In a venture capital model, where risks are very high, successes would be the exception but the returns from those successes would be large. Given that there is a trade-off between risk and return, NCF should presumably be comfortable with – indeed expect - a high level of failure.

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