Final Report

Joint End Review of: RAF-11/0800 and QZA-13/0256

(Case No.: 1600130)

3 June 2016

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CLIENT

Norad

PREFACE

This report covers the Joint End Review (hereafter also "the Review") of the following two projects:

- ***"Global Framework for Climate Services (GFCS) – Adaptation and Disaster Risk Reduction in Africa"*** (also referred to as "*Norway 1*", Norad No.: RAF-11/0800)
- ***"Global Framework for Climate Services (GFCS) Adaptation Programme in Africa"*** (also referred to as *"Norway 2*", Norad No.: QZA-13/0256)

in addition to an assessment of a "Concept Note" for a new programme:

- ***"Enhancing Community Resilience through improved Weather and Climate Services to the Agriculture and Fisheries sectors in to East and West Africa"*** (referred to as "*Norway 3*")

The Review was undertaken during the period April-June 2016 by a Review Team from Nordic Consulting Group (NCG), strengthened by a national expert from The Gambia.

Reviews and assessments of programmes and projects are part of the normal project cycle in development cooperation supported by the Norwegian Government. The projects were assessed starting with a desk study of written documents. The Consultant thereafter participated as an observer in a Project Steering Committee meeting in Geneva under *Norway 2*, followed by field visits to The Gambia (*Norway 1*), and Tanzania and Malawi (*Norway 2*) during the period 12-28 April 2016.

The projects aim at increasing the resilience of those most vulnerable to the impacts of weather and climate-related events through the establishment and implementation of procedures for climate services in several African pilot countries.

The Draft Report was submitted on 20 May 2016, and the final version was submitted 3 June 2016, incorporating the comments from Norad to the Draft Report (enclosed in *Appendix 6*).

The Team comprised the following members:

- Mr Tore Laugerud, Team Leader, Nordic Consulting Group (NCG) Norway
- Mr Thor-Jürgen Greve Løberg, Economist, NCG Norway
- Mr Saikou B. M. Njai, Environment/Agricultural Management Expert, Mahfous Engineering Consultants, The Gambia.

Mr Mike Fergus, NCG, undertook QA. The Team wants to thank all the involved project partners for their open and kind contributions during the work, especially the Department of Water Resources in The Gambia (*Norway 1*); and the GFCS Project Officer in Nairobi, the Tanzania Meteorological Agency (TMA) and the Department for Climate Change and Meteorological Services (DCCMS) in Malawi (all *Norway 2*), for arranging the logistics and meeting itinerary during the field visits.

3 June 2016
Tore Laugerud, Team Leader
Nordic Consulting Group (NCG) Norway

(Front cover photo: PICSA training of Binoni Radio Listening Hub, Balaka District, Malawi, conducted by a Malawi Red Cross Volunteer. Photo: Tore Laugerud, NCG Norway).

The conclusions and recommendations in this report are clearly those of the Review Team, and do not necessarily reflect the opinion of Norad, WMO, GFCS Secretariat, TMA, DCCMS or any of the individual persons or partner institutions consulted.

LIST OF ACRONYMS AND ABBREVIATIONS

AfDB	-	African Development Bank
AGRHYMET	-	Agrometeorology, Hydrology, Meteorology
AMCOMET	-	African Ministerial Conference on Meteorology and Climate Services
ARC		Agricultural Research Center (in Republic of South Africa)
AR	-	Annual Report
AU	-	African Union
CB	-	Capacity building
CC	-	Climate change
CCAFS	-	Climate Change, Agriculture and Food Security (under CGIAR)
CDMS	-	Climate Data Management System
CGIAR	-	Global Agricultural Partnership (HQs in New York)
CHF	-	Swiss franc
CICERO	-	Centre for International Climate and Environmental Research (Oslo)
CIRDA	-	Climate Information for Resilient Development in Africa
CMI	-	Christian Michelsens Institute (Bergen)
CN	-	Concept Note
COP	-	Conference of the Parties
CS	-	Climate service
DCCMS	-	Department of Climate Change and Meteorological Services
DfID	-	Department for International Development (in UK)
DRC	-	Democratic Republic of Congo
DRR	-	Disaster Risk reduction
EA	-	East Africa
ECMWF	-	European Centre for Medium Range Weather Forecasts
EWS	-	Early warning systems
GCCA	-	(EU's) Global Climate Change Alliance
GEF	-	Global Environmental Facility
GFCS	-	Global Framework for Climate Services
GFDRR	-	Global Facility for Disaster reduction and Recovery
GIEWS	-	(FAO's) Global Information and Early Warning System
HCCT	-	Health and Climate Core Team (Tanzania)
HCCCT	-	Health and Climate Change Core Team (Malawi)
HEWS	-	(WFP's) Humanitarian Early Warning Service
HQs	-	Headquarters
IFRC	-	International Federation of Red Cross and Red Crescent Societies
ICRAF	-	International Centre for Research in Agroforestry (World Agroforestry Centre, Nairobi)
IIED	-	International Institute for Environment and Development
IITA	-	International Institute for Tropical Agriculture
INDARE	-	Indian Data Rescue Initiative
IRA	-	Institute of Resource Assessment (under UDSM)
IRI	-	International Research Institute (at Colombia University, USA)
JPO	-	Junior Professional Officer (in UN system)
KM	-	Knowledge Management
LDCS	-	Least Developed Countries Fund
MASA	-	Meteorological Association of Southern Africa
M&E	-	Monitoring and Evaluation
MFA	-	(Norwegian) Ministry of Foreign Affairs
MoH	-	Ministry of Health
MRC	-	Malawi Red Cross
MTR	-	Mid-term Review
NAP	-	National Adaptation Plan
NAPA	-	National Adaptation Programme of Action
NCG	-	Nordic Consulting Group
NHMS	-	National Health Measurement Study
NMHS	-	National Meteorological and Hydrological Services
NOK	-	Norwegian kroner
Norad	-	Norwegian Agency for Development Cooperation
NORCAP	-	Norwegian Capacity
NRC	-	Norwegian Refugee Council

NTCCC	-	National Technical Committee on Climate Change
OCHA	-	UN Office for Coordination of Humanitarian Affairs
OND	-	October November December
PCU	-	Project Coordination Unit
PDT	-	Project Development Team
PICSA	-	Participatory Integrated Climate Services for Agriculture
PO	-	Project Officer
PSC	-	Project Steering Committee
RC	-	Red Cross
RCMS	-	Regional Specialised Meteorological Centre
REC	-	Regional Economic Communities
RMDP	-	Resource Mobilization Department
RSA	-	Republic of South Africa
SG	-	Secretary General
SMART	-	Specific, measurable, available/achievable, relevant and time-bound (indicators)
SMS	-	Short Message Service (on mobile phones)
SWFDP	-	Severe Weather Forecasting Demonstration Project
TA	-	Technical assistance
TANDREC	-	Tanzania Disaster Relief Coordination Committee
TL	-	Team Leader
TMA	-	Tanzania Meteorological Agency
ToR	-	Terms of Reference
ToT	-	Training of trainers
TWG	-	Technical Working Group (Malawi)
UDSM	-	University of Dar es Salaam
UK	-	United Kingdom
UN	-	United Nations
UNCCD	-	United Nations Convention to Combat Desertification
UNEP	-	United Nations Environment Programme
USD	-	United States dollars
V&A	-	Vulnerability & Adaptation
WA	-	West Africa
WASH	-	Water, Sanitation and Hygiene
WB	-	World Bank
WFP	-	Word Food Programme (under UN)
WHO	-	World Health Organisation (under UN)
WISER	-	Weather and Climate Information Services for Africa
WMO	-	(UN) World Meteorological Organisation

MAIN CONCLUSIONS

1. The GFCS Secretariat (under WMO) is leading the implementation of *Norway 2* in a partnership of 6 more partners. This is an unwieldy and bureaucratic set-up.
2. Effectiveness of *Norway 1* is difficult to measure without a logframe being prepared. However it is on the way towards the goal. Effectiveness of *Norway 2* is satisfactory, although there have been cooperation problems between the research partners.
3. Efficiency of both projects is not satisfactory. Too much (25%) of the financial resources are used on administration and overhead costs, and the Consultant believes this is excessive. This resulted in relatively few final beneficiaries being reached at grass-roots level.
4. It is still too early to conclude the impact of the two projects. More follow up and capacity building is required to make the project outputs sustainable, especially in *Norway 1*, but prospects are rather good.
5. Financial reporting was satisfactory in *Norway 2*, but not in *Norway 1*. Risks have been superficially treated in *Norway 1,* but rather professionally handled in *Norway 2*.
6. Expertize from NORCAP (NRC) have not been utilised so far in the projects. However, the present NORCAP experts, and expected future ones, will surely contribute to sustaining the efforts started under both projects.
7. The proposed *Norway 3* project should be supported and led by GFCS, however with a reduced number of countries in West Africa (i.e. 3), and with no new countries in East Africa. Design of *Norway 3* should be based on the experience and lessons learned from both *Norway 1* and *Norway 2*, especially the latter.
8. The PICSA training to farmers should be intensified in Malawi and Tanzania, and may be taken on board in West Africa? Radio listening hubs and SMS services to farmers should continue, and support to health-climate services should continue and be strengthened at country level.
9. *Norway 3* should avoid a top-heavy structure, with more decision-making on details taking place at country level. WMO, WFP, WHO and IFCF should be partners in *Norway 3*. Expert assistance should be sought from NORCAP at country level.
10. GFCS Secretariat, in close cooperation with the *Norway 3* partners, must develop the application further and jointly design the project, may be with some Norad support.

EXECUTIVE SUMMARY

1. INTRODUCTION & BACKGROUND

1. The *Norway 1* agreement was signed with World Meteorological Organisation (WMO) in Dec 2011, with NOK 56.8 million from Norway over the period 2011-15. The project covered a global component related to the establishment of the Global Framework for Climate Services (GFCS) and support to 17 countries in West Africa. The project will end in July 2016.
2. The *Norway 2* agreement was signed in Nov 2013, with NOK 60 million from Norway during the period 2014-16, with an additional NOK 2 million later. The project is covering two pilot countries - Malawi and Tanzania, and the following partners: WMO; Centre for International Climate and Environmental Research (CICERO); Chr. Michelsens Institute (CMI); The research program on Climate Change, Agriculture and Food Security (CCAFS); International Federation of Red Cross and Red Crescent Societies (IFRC); World Food Programme (WFP); and World Health Organization (WHO).
3. The Norwegian Refugee Council (NRC) is also receiving funds from Norad under the project "*Strengthening the capacity of climate services through expert deployment*", supplying expertise through the NORCAP roster of experts. Allocation NOK 24.2 million during 2015-17.
4. The Concept Note of *Norway 3* is based on *Norway 1* and *2*.
5. A team from Nordic Consulting Group (NCG) Norway undertook the Review, assisted in The Gambia by a national consultant, during April/May 2016.
6. The Consultant was observer at a Project Steering Committee (PSC) meeting in Geneva, before going on field visits to The Gambia (*Norway 1*), Tanzania and Malawi (*Norway 2*), meeting with project partners, stakeholders and grassroots beneficiaries in the districts.

2. REVIEW RESULTS

1. Effectiveness

1. The Application for *Norway 1* does not contain a proper logframe. A sort of "logframe" was established later in each activity (outputs and outcomes) under the two main components: 1) Strategic Development - supporting the GFCS Secretariat and African Ministerial Conference on Meteorology and Climate Services (AMCOMET); and 2) Capacity building for improved weather and climate services.
2. Four new activities were added as *Norway 1* proceeded. Norad took over the project from MFA in June 2014.
3. *Norway 1* has since inception been managed by the Project Coordination Unit (PCU) located in the Office for Resource Mobilization and Development Partnerships in WMO. The GFCS Secretariat is a separate office, now located in the Climate and Water Department. *Norway 2* started out under PCU management, but was shifted to the GFCS Secretariat in 2015.
4. The Application for *Norway 2* had no proper logframe either, but a Monitoring and Evaluation (M&E) framework was established in June 2014, with indicators. The project is divided into components covering: National Level, Local Level, and Crosscutting.
5. *Norway 2* is directed by the PSC where all partners are members, in addition to Norad (resulting from a legal "mishap"). The PSC set-up requires a lot of travel for the partners (mostly to Geneva). The GFCS Project Officer (PO) sits in Nairobi from March 2015. The PSC set-up has too many institutions involved and the Consultant believes this arrangement is far too costly.
6. The meteorological services in the two pilot countries lead the implementation of *Norway 2*: Tanzania Meteorological Service (TMA) and Dept. of Climate Change and Meteorological Services in Malawi (DCCMS), supported by Project Delivery Teams (PDTs). Two international partners work at grassroots level - Red Cross (with volunteers) and WPF (training of district extension workers).
7. Rating the effectiveness of *Norway 1* was complicated due to its *process* implementation characteristics. Activities have been added according to the needs as the project progressed, but all activities are contributing to the overall goal of the project as defined in the Application. The Consultant visited The Gambia, and found that although the roving seminars for fishermen and farmers had been "successful", there is no system in place to follow-up thereafter. The meteorological service and the Ministry of Agriculture have no agreement of cooperation in the country, yet.
8. The effectiveness of *Norway 2* is considered satisfactory. However, a disagreement between the research partners in the project on the scope and contents of the baseline studies is clearly unsatisfactory. It seems that this is an important reason for the baseline surveys not being designed as a strategic tool to monitor progress and effects, and that there are seemingly "no funds left" to do full monitoring in 2016. The Consultant believes that the PICSA training and radio listening hubs are the most useful achievements of the project.
9. In general however, and notwithstanding the baseline studies, the Consultant believes that the research institutions have delivered what was anticipated, holding a professional standard. There has been no proper interaction/feedback from other partners on the studies by the researchers, and there seems to be no pre-set mechanism for integrating the study findings/conclusions into *direct* use for the partners.
10. Some of the partners felt that the partnership was "imposed" upon them before the Application for *Norway 2* was submitted. While the WFP and Red Cross have cooperated quite well, the research organisations have not co-produced as expected, and two sets of baseline studies in both countries were eventually produced. WHO has had its special agenda cooperating closely with the Ministries of Health in the countries, but the activities in both countries are lagging behind schedule.
11. Monitoring of *Norway 1* is done by the PCU in WMO Geneva, annual reports being fairly brief narratives of listed activities.
12. The GFCS Project Officer in Nairobi is monitoring *Norway 2* on behalf of the GFCS Director in Geneva, but also all the project partners monitor and report through their own systems.
13. There have been no major unexpected impacts in the projects.
14. Neither of the two projects have benefitted from the NRC-programme, supplying expert deployment to climate services (NORCAP), which represents missed opportunities to the projects. Partly due to the long NORCAP recruitment period, there is no time left to take such on board in this phase. However, the NORCAP experts in place, and required in the next phase, will surely sustain the efforts started under both projects, and thus the outcomes of these and in general the work of GFCS.

2. Efficiency

1. *Norway 1* documentation of progress towards objectives is fragmented, inconsistent and deficient in terms of quality and timeliness, so the Consultant had to extrapolate expenditure figures.
2. The budgeting and financial reporting on *Norway 2* is satisfactory, but it is difficult to delineate the expenditures. However, around a quarter of the total budget comprises administration fees, WMO overheads and project management, which the Consultant considers to be unjustifiably high. The administration costs of CICERO/CMI are the highest (around 39%!), with WFP having the lowest (9%). Only around 22% of the budget was used for the direct benefit of the target groups at grassroots level,

which is far too little!

3. The Consultant believes that it is challenging to measure cost-effectiveness in both *Norway 1* and *Norway 2*, as it has been difficult to track resources used for the concrete results on the ground.
4. *Norway 1* has gone in *breadth* (17 countries) and not in *depth*, but has reached only 11,160 farmers with its roving seminars in total, not being fully satisfactory.
5. *Norway 2* is a "pilot project", and as such a lot of time had to be spent to establish the processes. Only around 6,000 farmers have been reached until now, and the Consultant believes that this is not very impressive.

3. Impact

1. *Norway 1* has no proper logframe against which to measure impact, and in general it is too early to detect impacts. However, the Consultant believes that the project is "on the way" towards reaching the goal through the activities implemented. The GFCS has been established and is operational, e.g. managing *Norway 2*. The AMCOMET is operational, but impacts from this platform are difficult to detect readily. Some awareness has been raised amongst fisher folks and farmers (e.g. in The Gambia), but much more follow-up is required to ensure lasting impacts.
2. In *Norway 2* the activities were delayed, with the health activities *significantly* delayed, so impact will also materialise later. The Consultant got a good impression of the effect of the PICSA training amongst farmers and pastoralists.

4. Sustainability

1. It is premature to assess *beneficiary* sustainability of *Norway 1* after a mere 2-days field visit. The fisher folks learned quickly the meaning of the "weather flags" being raised on the beaches. Also some farmers have been benefitting from weather forecasts, radio programmes and SMSs. The system with farmer rain gauges is not sustainable without proper collection of data and follow-up.
2. *Norway 1* has done little capacity building (CB) in the meteorological services in West Africa, and more is needed.
3. The farmers in *Norway 2* that have been trained through PICSA, and have formed radio listening hubs, seem to have a large probability of sustaining their new knowledge. However sustainability is only partly in place so far.
4. In *Norway 2* the CB in the meteorological services has been rather good. As the awareness amongst donors and the governments has increased regarding the importance of climate services, especially related to the recent hazards resulting from El Nino, floods and drought, it is believed that institutional sustainability of the meteorological services in both countries is satisfactory, especially in Malawi. WMO has also got good institutional capacity building through support to GFCS Secretariat, and to the Climate-Health Office supported by Norway.

5. Project Risk and Financial Management

1. The financial reporting in *Norway 1* suffered from the lack of proper results management as well as inadequate financial reporting. Under *Norway 2,* GFCS has adhered to the financial reporting schedule set out at inception and demonstrated greater diligence in risk analysis.
2. Risk assessment and management issues in *Norway 1* were superficially treated in project design and preparation, and were inadequately addressed in progress reporting at the project level.
3. In *Norway 2* risks have been handled in a rather professional manner, with clear mitigation steps appearing in the project implementation plan and throughout subsequent progress and annual reports. However, there is scope for improvement.

3. RECOMMENDATIONS FOR *NORWAY 3*

1. Assessment of Norway 3 Concept Note

1. A Concept Note (CN) was submitted Sep 15, and Norad has not yet responded to this. It contains elements both from *Norway 1* and *Norway 2*, West Africa (WA) and East Africa (EA), and a Knowledge Management (KM) component, at a total cost of NOK 80 mill over 4 years.
2. The suggested activities in EA do not directly overlap with other interventions, but they must be closely coordinated with the Green Climate Fund project in Malawi (UNDP) and the DfID-supported project under planning in Longido District, Tanzania.
3. The contents and objectives of the CN are largely relevant, but the number of countries in the WA component is on the high side, considering the limited funds available. WMO is suggested as the lead partner, and GFCS is not mentioned in the CN.
4. The CN has been prepared by WMO alone, without consulting the countries and other partners in *Norway 2*. This is not a wise approach.
5. The budget seems to have been "distributed" with equal budget shares for WA and EA, prompting the Consultant to question the veracity of needs assessments carried out in the initial planning stage.

2. Recommendations for *Norway 3* Design and Contents

1. Building on the experience of *Norway 2, Norway 3* must ensure a clear linkage to the respective National Adaptation Programmes of Actions (NAPAs).
2. Based on the principle of concentration, the number of countries in WA should be reduced to say 3 (limited resources). The Gambia, Mauritania and Senegal could be considered.
3. In EA, continued support should be given to Malawi and Tanzania. It is advised against involving a new country (Mozambique), or new sectors, as “deepening” and rolling out in existing countries seems more appropriate.
4. Work on the Climate Services Platforms in the countries must continue, both in East and West, to make them sustainable. Likewise the PICSA training of intermediaries and farmers must continue, with advisory services to follow at grassroots level. The work with climate and health must also continue. This also includes the DRR activities as an integral part in both agriculture and health sectors.
5. The WA component should take on board lessons learned from *Norway 2*.
6. The SMS forecast service, support to radio listening hubs and production of radio programmes for agriculture (incl. health topics?) should continue.
7. The project must be implemented under GFCS, as this framework has more legitimacy than WMO alone.
8. The main *operational* partners from *Norway 2*: WMO, WHO, WFP and IFRC, should also be partners in *Norway 3*, and must participate in the detailed project planning to secure ownership.
9. Research institutions in general should *not* be project partners. Development of CSs curriculum for e.g. LUANAR training of extension workers in Malawi, could be an activity in the project. The PICSA trained CCAFS employees in Malawi and Tanzania should be retained, but considered under another employment.
10. More decision-making on detailed tasks should take place at country level, with the global level retaining the overall coordinating and managing role. *Norway 3* must not be top-heavy.
11. The position of GFCS PO in Nairobi should continue, with a reduced time input. The GFCS Regional Coordinator in Dakar should follow up *Norway 3* in WA.
12. The functions of the present PDTs should be split in two: A National PSC dealing with issues *directly* related to the project (work plans, budgets, etc.); and the CS Platform, where several stakeholders can discuss all issues related to CSs in general.
13. The GFCS Focal Point function in Blantyre should be delegated to the DCCMS office in Lilongwe.
14. NORCAP experts should be considered for: i) the meteorological services in Malawi and Tanzania; ii) health advisors to the countries, alternatively one covering both. Also the WPF advisory should be considered being moved closer to the countries.
15. A budget allocation for discussion for *Norway 3* could be NOK 60 million over 3 years, (EA-64%, WA-20%; KM-8%; Support Costs-8%).
16. Budgeting and reporting must be on activities and also on cost categories. A contingency item could be included to cover unforeseen need for research/consultancies. Gap funding for *Norway 1* activities in the *Norway 3* WA countries should preferably be found outside Norway.
17. Norad should consider supporting a proper planning and design stage of *Norway 3*, including a documentation of lessons learned from the first phase of *Norway 1* and *Norway 2*.
18. A simple standardised document managed system should be established at project start-up.

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APPENDICES:

1. INTRODUCTION AND BACKGROUND

1.1 Background

During the high-level "World Climate Conference-3" in Geneva in 2009, arranged by the UN World Meteorological Organisation (WMO), it was decided to establish a Global Framework for Climate Services (GFCS). GFCS was an UN-led initiative spearheaded by WMO, and with a secretariat sitting in WMO in Geneva, established to guide the development and application of weather and climate information/services in developing countries.

Norway has played a vital role in development of the GCFS, and supported the work of a high level panel in 2010 with NOK 2.5 million. The aim of the panel, and later support, is to strengthen climate change adaptation and disaster risk reduction by enabling weather and climate information to be developed, disseminated and used for planning and climate change-related decision-making at several levels in different sectors.[1]

The Norwegian Development Minister (Mr Erik Solheim), in December 2011 in Durban (Conference of the parties (COP) 21), signed a 4-year agreement with WMO named: "*Global Framework for Climate Services – Adaptation and Disaster Risk Reduction in Africa*", commonly known in WMO as "***Norway 1***", based on a proposal from WMO dated 7.11.2011[2]. The Norwegian allocation was NOK 56,8 mill over the period 2011-2015. In addition to a global component of institutional support (amongst other to GFCS), the project also involved grassroots activities in 17 West African countries. Planning took place during the period up to December 2013 when a work plan for 2014 was presented, approved by MFA in March 2014. The project has got a no-cost extension and will end in 31 July 2016.

In November 2013, Norway signed a Memorandum of Understanding (MoU) with GFCS for another project under the GFCS framework, namely the "*GFCS Climate Services Adaptation Programme in Africa",* known in WMO as "***Norway 2***", with an allocation of NOK 60 mill over a period of three years (2014-2016). The pilot countries for this programme are Tanzania and Malawi, and the implementing partnership comprises the following institutions:

- World Meteorological Organization (WMO), HQs in Geneva
- The research program on Climate Change, Agriculture and Food Security (CCAFS) under the Global Agricultural Partnership (CGIAR), Headquarters (HQs) in New York
- Centre for International Climate and Environmental Research (CICERO) in Oslo, Norway
- Christian Michelsens Institute (CMI) in Bergen, Norway
- International Federation of Red Cross and Red Crescent Societies (IFRC) in Geneva
- World Food Programme (WFP), HQs in Rome
- World Health Organization (WHO), in Geneva

Norway 2 is administered by the GFCS Secretariat in Geneva, and in 2015 Norway allocated additional NOK 2 mill to *Norway 2*, for the strengthening of the GFCS Secretariat (a programme manager position in the GFCS office will be filled in October 2016). The two projects were signed by the Norwegian Ministry of Foreign Affairs on behalf of the donor, but the responsibility for *Norway 1* was transferred to Norad on 30 June 2014 (at which time MFA had not yet assessed the annual report for 2013) and for *Norway 2* on 4 June 2014.

Norway is also supporting yet another initiative related to climate services (CS), this agreement having been signed between MFA and the Norwegian Refugee Council (NRC) in 2015: "*Strengthening the capacity of climate services through expert deployment*", with NOK 24,2 mill over a period of three years (2015-2017) (also referred to as "***The NRC-programme***"). The programme aim is to strengthen the capacity of climate

[1] In fact, Norway had also supported a "Norway 0" project with NOK 0.5 million in Uganda with Mobile Weather Alerts on Lake Victoria, but this support ended in 2013, and the project continued with own money. DfID has later supported the activities through the project WISER (Weather and Climate Information and Services for Africa) that "*will help at least 24 million people across Africa (focusing initially on East Africa) to be more resilient to natural disasters and climate change by 2030 by improving early warning systems as well as helping them make better decisions by knowing what the weather and climate is likely to be*".

2 It should be noted that already in May 2011 a Norwegian high-level work group (led by Mr Jan Egeland) proposed creation of the GFCS. Norway committed NOK 15 million to this work. The real allocation was NOK 40 mill above this.

services through deployment of expert assistance where needed and requested. This deployment of experts is done through the so-called NORCAP (Norwegian Capacity) roster, with the aim of increasing capacity of national and sub-regional climate services and climate sensitive sectors and vulnerable population groups in Africa. The project is implemented by the NRC, maintaining a close collaboration with the WMO and the GFCS Secretariat (MoU between NRC and WMO signed June 2015).

In 2015, MFA/Norad received a new proposal from WMO (working title: *"**Norway 3**"*), clearly building on elements from *Norway 1* and *Norway 2*, including continued support to GFCS Secretariat in Geneva. The assessment of *Norway 3* is part of this assignment, with clear references to the achievements materialised in *Norway 1* and *Norway 2*.

1.2 Review Mandate, Approach and Methodology

A Review Team from Nordic Consulting Group (NCG) Norway ("the Consultant") was contracted by Norad following a tender process. As the Team Leader had working experience from both Tanzania and Malawi, there was only a need for a national expert in the Gambia ("Gambia") to support in the Review. Only the Team Leader participated in the field visits, whereas the Economist in the team undertook deskwork on specific issues related to financial management, budgets and economy, etc.

The main purpose of the Review was to "*create an informed basis for continued support from Norway under the GFCS framework, based on former achievements and experiences and to avoid overlap and increase synergies and cooperation with other programmes and projects*".

The Team Leader of the Consultant met with Norwegian Agency for Development Cooperation (Norad) in Oslo and had a brief telephone conversation with NRC prior to starting the fieldwork, by being an observer the second day of the Project Steering Committee (PSC) meeting in Geneva on 12 April 2016 for *Norway 2*, and briefly meeting with the international project partners on that day and the following. The Consultant thereafter went to The Gambia and met with the project implementer - the Department of Water Resources, being responsible for the National Meteorological and Hydrological Services (NMHS) in the country, in addition to meeting with some grassroots beneficiaries (farmers and fishermen).

The Consultant then proceeded to Tanzania where he was observer in the Project Development Team (PDT) meeting in Dar es Salaam, followed by individual meetings with the national project partners (Tanzania Meteorological Agency (TMA), Institute of Resource Assessment (IRA) at the University of Dar es Salaam (UDSM), World Health Organisation (WHO) Tanzania, Tanzania Red Cross Society and World Food Programme (WFP), Tanzania). Thereafter the TL went to Arusha and visited the Agricultural Department of Longido District Authority, followed by a farmer's group in Logido District (Masaii tribe). On this field visit the Consultant was accompanied by the Country Focal Point from WFP, who had been responsible for the logistics of the fieldwork. Unfortunately, the Consultant was not able to meet with the CCAFS Focal Point, as he was on travel.

Thereafter the TL went to Malawi and had meetings with WHO Malawi and Ministry of Health (MoH), Malawi Red Cross (MRC) and WFP Malawi in Lilongwe. Field visits were undertaken to a primary school in Mtandire in Lilongwe Urban District, followed by visits to Radio Listening Groups and farmers in Mpamasi and Binoni villages in Balaka District in Southern Malawi. Meetings in the field were also undertaken with the District Coordinator of MRC and a Red Cross volunteer, who conducted a session of the PICSA (Participatory Integrated Climate Services for Agriculture) training for farmers, where the TL was an observer. The TL then met with the District Commissioner in Balaka District and several officers responsible form agriculture, irrigation, nutrition, land use and crops in the district authority.

The field visits gave the TL a very good impression of the activities and impact of the project, especially for the most important beneficiaries at the grassroots. The GFCS Project Officer from Nairobi accompanied the TL during the field visits in Tanzania and Malawi, and this gave the TL a good and useful opportunity to interact and discuss with her all through the visits.

It is fair to mention that start of the Review was done "in a hurry" due to the fixed date for the PSC meeting in Geneva. This left little time for reviewing the abundance of documents related to the two projects before going into the field. This somehow hampered an effective start-up of the Review, although the Consultant caught up with the document review during the fieldwork. It is also relevant to mention that another limiting factor for the Review was the fact that the very tight fieldwork itinerary had been prepared by WMO in advance, and agreed by Norad, with no flexibility for the Consultant to influence the itinerary when coming on board. This left little flexibility for adjustments underway. Having said that, the fieldwork was largely undertaken according to the programme, only with minor adjustments, and with a couple of minor logistical

flaws (notably in Malawi with confusion on transport arrangements one day).

Appendix 4 lists the persons consulted and met by the Consultant during the Review. *Appendix 5* contains the Terms of Reference (ToR) for the Review and the field visit programme.

2. REVIEW RESULTS

Effectiveness largely describes the project progress, as compared to the work plans and budgets, and the extent to which the results (outputs) and objectives have been achieved so far, or are expected to be achieved

2.1 Assessment of Effectiveness

2.1.1 Project Designs[3]

a) Norway 1

i) Project logframe and Activities

The Application for *Norway 1* (dated 09.12.2011) does not contain any proper project logframe, although the standard application format used (developed by the Norwegian Ministry of Foreign Affairs (MFA)), invites such formulations. However, in the Agreement between MFA and WMO the following *goal* is formulated: "*Contributing to amelioration of weather and climate related disaster and to climate change adaptation mainly in Africa, through Operationalising the WMO Global Framework for Climate Services*". The objectives of the project are: "*Establishing the high-level strategies and mechanisms at global and regional level to develop Weather and Climate Services through the GFCS: etc. ….*", which really is just a listing of the main activities in the project.

The two main components of the project are divided into two sub-components each in the Application, but the objectives and outcomes formulated do not at all comply with the modality for such formulations and will thus not be commented further. In general, the format of the Application is somewhat disorderly organised[4]. It is clearly a flaw that MFA did not ask for a proper logframe to be formulated from the very start of the project, as this has been the standard modality in Norwegian Development Cooperation since 1991. This should be possible to formulate in spite of the project being "innovative". The Application only focused on description of activities/outputs, although some headings indicate that "objectives" are formulated. In Nov 2013 however, a sort of "results framework" for each of the *individual* components was established, listing outputs and outcomes. It is also noted that 4 new sub-components have been added under Component 2 as the project has progressed. Such "building the road as one goes along" is unusual for development cooperation projects, but it surely has given the required flexibility to the project management in WMO to direct funds to where the needs are the greatest.

The responsibility of the project was formally transferred to Norad in June 2014, and Norad's comments to the 2013 Annual Report also underlines the unstructured results framework and also the undocumented changes in the design structure since start-up. Norad still concludes that the process in 2013 is "satisfactory".

At the beginning of 2016, the project design looks as listed below (with the headings of the components and sub-components slightly changing during implementation in various project documents, in addition to the sequencing and numbering of the activities changing from one year to the other). There are activities and outputs listed in the work plan for 2015, in addition to the outcomes formulated, but without indicators. In the draft 2015 Annual Report (which will *not* be submitted as the final report will cover the last 1.5 years) there are "key objectives", outcomes and outputs listed, but the sequencing of the activities are slightly different from the work plan and the formulations of the "objectives"/outcomes are different, which is disorderly.

Component 1: Strategic Development (for Weather and Climate Services)

a) Global Framework for Climate Services (GFCS):

Establishment of the secretariat in WMO, Geneva, and supporting the operations.

Outcome: "*Institutional support is in place to develop the GFCS with particular focus on the development of*

[3] It is noted that the terms "project" and "programme" are both used for both *Norway 1* and *Norway 2*, very inconsistently both in writing and verbally. In this report, the term "project" is mostly used when referring to both, but for some issues "programme" is used, as this is common terminology, e.g. Programme Steering Committee.

[4] Also Norad, in their internal memo assessing the 2013 AR considers the results framework to be "*unstructured*". But it is also mentioned that as the project is "*innovative*", which creates special challenges to formulation of the results framework.

the governance mechanism and the integration of health in climate and weather issues" and "*Institutional Support is in place for the integration of health in climate and weather services*". The joint climate-health office in GFCS was established in 2014 with a fully employed person from WHO paid under *Norway 1*, and the second outcome was added to the sub-component at this time.

b) African Ministerial Conference on Meteorology and Climate Services (AMCOMET):
Establishing AMCOMET as "*a high level mechanism for the strategic development of weather and climate services in Africa*". Outcome: "*Political Leadership is provided for the provision of weather, water and climate information services".*

Component 2: Capacity Building for Improved Weather and Climate Services[5]

a) Climate Data Rescue Activities (added in 2014):
Outcome: "Digitised climate data is used for climate and weather predictions".

b) (The Norwegian) Fellowship Programme (added in 2013):
Outcome: "Staff of NMHS has the necessary competency to deliver high quality climate and weather services".

c) Severe Weather Forecasting Demonstration Project (SWFDP, included in Application):
This programme has been running since 2006. Outcome: "*NMHS provide timely Severe Weather Forecasts and Warnings*", but in Annual Report for 2014 and 2015 also formulated as "*Better managed NMHS and NMHS provide timely and accurate Severe Weather Forecasts and Warnings*".

d) Public Weather Services (PWS, added in 2013):
Outcome: "The NMHS have the capacity to deliver improved forecasts and warnings on severe weather events (provided by the SWFDP)".

e) The extension and operationalization of the agriculture-related projects running in West Africa – Metagri-OPS (also referred to as "*Development of Weather and Climate-related Services for Agriculture*" (included in Application): Outcome: "Agricultural users make informed decisions based on weather and climate info".

f) African Soil Moisture Project (added from 2015):
Outcome: "*To assist agricultural users to make decisions based on scientifically validated data on weather and climate*". (In draft 2015 AR also referred to as "goal").

g) Climate and Health Project Activities (added from 2015):
Outcome: *"Public health sectors make use of high quality climate and weather data in decision making".*

In addition, another one-time activity "*Conference on the Gender Dimensions of Climate Services*" was added in 2014, following an agreement with Norad. Some funds were re-allocated to the Conference on the Gender Dimensions of Climate Services that took place in Geneva 5-7 November 2014

ii) Project Organisation
Figure 2.1 in *Appendix 1* shows the managerial set-up of the *Norway 1*. As can be seen, the Project Coordination Unit in the Office for Resource Mobilisation and Development Partnerships leads the project, headed by the Unit Head supported by a Junior Professional Officer (JPO) paid by Norway (coming on board in 2013). The project also pays the salary of a Health Officer in the joint WMO-WHO Climate-Health Office under GFCS, supporting especially *Norway 2.* In addition, other departments in WMO are involved in specific activities. The establishment of GFCS in 2011, implementing *Norway 2*, was financially supported under *Norway 1*, with an Implementation Plan being developed in 2012[6]. 17 countries are involved in the METAGRI OPS programme with the Roving Seminar to farmers and fishermen. The Consultant believes this is perhaps the most important activity in the project, as it directly targets the poor farmers and fishermen. The Gambia was briefly visited during the Review.

[5] In reports also referred to as "*Development of Technical Capacity and Service Delivery*".
[6] It should be noted that the sub-regional offices of WMO (in Nairobi and Abuja) have not been involved in the implementation of *Norway 1* as they have not had any project management capacity (until the *Norway 2* Project Officer was posted in Nairobi) but have consisted only of a WMO representative. (A NORCAP roster GFCS Coordinator in Dakar Senegal came on board around December 2015, but has not participated in *Norway 1* as it initially came to an end at the time, before getting an extension).

b) Norway 2

i) Project logframe and Activities

It is noted that no proper logframe with objectives and indicators was submitted with the Application for funding to MFA (final version dated 20 September 2013, but the last version is actually from 4 October, submitted after MFA asked the applicant to include a risk analysis[7]). However, when the project was handed over to Norad in June 2014, the project management was asked to formulate a proper logframe for the project. Following an internal Mid-term Review of the project, submitted in October 2015 and concluding that "*programme design not adequately reflecting country needs*", a refined logframe (referred to as M&E Framework) was submitted. This was finally approved by Norad in a letter dated 19.02.2016. The final M&E framework is enclosed in *Appendix 3,* with indicators listed and the involved partners indicated under each activity. The main elements of the framework are also illustrated in *Figure 2.2* in *Appendix 1* for easy reference.

Project Goal/long-term objective: "*To increase the resilience of people most vulnerable to the impacts of weather and climate-related hazards*".

No project *purpose* has been formulated, but the project has been divided in three components, each with its own expected "impact" listed and thereunder "outcomes" with indicators formulated. The formulated *outcomes* are in fact *outputs* in the project to judge from the indicators, meaning they are deliverables that will be guaranteed by the project management before the end of the project. This mix-up of terminology is a normal shortcoming in several projects, and it requires solid experience to formulate a logframe properly. *Figure 2.3* in *Appendix 1* shows the logframe modality that is used by Norad in such projects/programmes, referred to as the Results Chain, where one result is building on another (notably outcomes are the results (effects) of the outputs, and the outcomes (formulated by the purpose) are significantly contributing to the impact/goal). In any developing cooperation project, the main reason for undertaking the intervention is ultimately the overall goal/impact. However, as this goal will obviously materialise in the far future, it is the outcomes/purpose that is the most important level to measure when the project is reviewed/evaluated. It is therefore normally important to formulate a proper purpose of the intervention. The lack of a purpose in this case has evidently not had any negative effect on the project implementation per se. The following outcomes (in M&E framework termed "*impacts*" at the three levels) and outputs have been formulated:

1. **National Level**: "*National actors have the capacity to design, tailor, deliver and evaluate climate services to support adaptation*":
   - *"A functioning national governance process is in place for programme implementation*
   - *National Framework for Climate Services established*
   - *The Meteorological Services are able to identify and respond to user-demand for climate services*
   - *Improved awareness and capacities of sectors (food security, health, DRR) to integrate climate related issues*
   - *National Adaptation Plans integrate climate service priorities in Malawi and Tanzania, towards improved longer term climate change adaptation".*
2. **Local Leve**l: "Targeted communities are better able to manage the risks related to climate variability":
   - *"The design of climate services is informed by clearly identified gaps and needs at the community level*
   - *Strengthened capacity of intermediaries and local institutions, including health and food security workers, to link climate information into action*
   - *Targeted households and communities are able to use climate services for the management of climate risks at household level".*
3. **Cross-cutting**: "*Improved understanding of the effectiveness of the GFCS in climate risk management and adaptation*", with 2 outputs.
   - *"Collection and integration of learning from the programme and effective communication of this to stakeholders*
   - *Effective coordination of climate service programmes in the targeted regions and countries".*

The indicators of the outputs are relevant, but few are quantitative and SMART (specific, measurable, available/achievable, relevant and time-bound). A couple are targeting per cent achievements (e.g. "*By the end of 2016, at least 80% of the households in the targeted communities are reached by radio advisories*").

[7] The date of the last version of the Application was not given the new date, by a mistake from the applicant. It is noted that the Consultant got the last but second version from Norad at Review start-up, showing how important consistent dating of documents is.

ii) Project Organisation

Figure 2.4 in *Appendix 1* shows the organisation of the project, as illustrated by the Consultant. The figure is assumed to be self-explanatory. The African programmes and frameworks with which the project is communicating are largely taken from the listing in the Application.

The project is managed by GFCS, which is located in WMO in Geneva[8], being the main partner. Other *operational* partners with running projects in the two target countries (Malawi and Tanzania) are the WFP, IFRC and WHO. The research institutions involved are: CCAFS, CICERO, CMI.

The Consultant was a bit surprised to see that the research institutions, which deliver research studies and surveys to the project, are sitting in the management group (read: the Programme Steering Committee – PSC). However, this obviously has to do with the history of how the project came into being, and the fact that this is a pilot project where learning lessons underway was important. Several of the partners in interviews with the Consultant mentioned that the MFA in Norway asked all the partners to prepare *one* project proposal with everyone on-board, following a joint seminar on climate services in 2013 where all the partners met. Some partners claimed that they did not really preferred to cooperate from the start, as they are very different and have different visions, missions and implementation modalities. However, the MFA obviously also wanted a "pilot" attempt for the parties to cooperate. It was emphasised in particular that the three research institutions should aim at "co-productions", something that became very difficult and never properly materialised.

In the Application, the roles of the partners are in theory defined, as there are lead partners dedicated to each activity, which seems orderly. However, the modality of proper *cooperation* and *interaction* between the partners is not clearly elaborated, and this has obviously also been as challenge in the project, as each partner has concentrated entirely on their described tasks. The Consultant assumes that piloting such cooperation of very different partners was part of the "testing", and as such the lack of more integration was may be not surprising and surely is a "useful finding" anyway. (The notable exception is the good cooperation between WFP and Red Cross at grassroots level).

The Consultant concludes that although the idea of cooperation between various institutions in climate services was noble and innovative, the mode of cooperation and implementation strategy could have benefited from more rigorous planning, as with the project design. Being a new field for cooperation, the MFA was bound to face certain challenges in planning and implementing complex interventions in this field. . This was also commented upon by several of the partners interviewed during the Review.

The Programme Steering Committee (PSC) has one representative from each partner, contrary to what is stated in the Application ("*no more than five people*"). Also Norad is a member of the PSC (clearly stated in the Agreement with WMO, Article IX.1[9]). Normally, the donor should not be part of the decision-making body in a project, as this will be a mixing of roles. In this way, the donor could be a "hostage" if things go wrong. Normally, the donor has an opportunity to influence the project in Annual Meetings with the implementing partner. The PSC set-up in the Project adds to the impression that the project is top heavy. Moreover, the fact that representatives have to travel to Geneva (in 2015 to Malawi) for the PSC meetings raises questions of cost-effectiveness. To illustrate, in the case of Malawi, the Consultant has calculated that approximately NOK 500,000 per year was spent on meetings, or about 9% of the total budget. This figure may in fact be larger, since the cost of per diem may be "hidden" in other parts of the budget (see *Section 2.2.2* below for a detailed assessment of cost-effectiveness)[10].

The GFCS Project Officer (PO) is sitting in Nairobi (in the compound of the WMO Regional Climate Center), working 80-90% of her time for *Norway 2*. She joined WMO as a JPO in September 2013 in the Project Coordination Unit (PCU) of WMO Geneva, funded by Finland. When the *Norway 2* Application was approved by MFA she was tasked with providing project coordination support for the project to the Head of the PCU[11]. Project management in WMO then decided to establish a Project Officer post in Nairobi, which was finally filled in March 2015 by the same JPO from Geneva[12]. In December 2014 the Project Management Board of

[8] GFCS started out under the PCU management, but is now located in the Climate and Water Department in WMO.

[9] The article states that MFA should be a member but this obligation was transferred to Norad when it took over responsibility of the project.

[10] This level of budget and expenditure detail was not available to the Consultant.

11 In addition, because of the intensive work with the countries during the Inception Phase and the delay with the formal recruitment for the Project Office post she was assigned to work from Nairobi for a three month period March - May 2014, but still as a JPO funded by Finland.

[12] Position advertised in April 2014, interview of candidates took place in October 2014, and offer given in December 2014.

WMO decided that *Norway 2* should be moved from WMO to GFCS, so that the Project Officer post in Nairobi also became part of GFCS from October 2014. The PO leads the day-to-day coordination of the project through frequent contacts with DCCMS and TMA and the other partners as required. She also compiles the reports from the partners, drafts the compiled annual reports, minutes from the PSC meetings, etc.

Whereas the Consultant believes that having the PO sitting in Nairobi is much more effective than having the PO sitting in Geneva, it became obvious during the interviews with the project partners and main national stakeholders in the two countries, that it would have benefitted the project to have a more experienced PO placed in the region. This is because the complexity of the project, e.g. related to the challenging "forced" cooperation between the different partners and especially the communication difficulties between the three research partners, could have required the intervention of a senior and seasoned professional who had the authority to engage directly and independently with counterparts.

The Project Delivery Team (PDT) in Malawi and Tanzania are the advisory bodies to the national implementing partners, the Department for Climate Change and Meteorological Services (DCCMS) in Malawi and Tanzania Meteorological Agency (TMA) respectively. The PDT comprises representatives of the operational global partners, but also other key ministries and institutions taking part in the project, e.g. Ministry of Health, Universities, and Disaster Management Departments. In Malawi, the National Technical Committee on Climate Change (NTCC) is the Steering Committee (SC) for both climate change (CC) and climate service (CS) issues, and in Tanzania the Tanzania Disaster Relief Coordination Committee (TANDREC) has been appointed the SC for CSs. Both these institutions are high-level institutions that are supposed to give policy directions, but they are not fully operational in relation to SCs yet (as understood by the Consultant), but will be from 2016 and thus also in the next phase of the project.

In order to understand the operational modality of the project, the Consultant has made two illustrations, *Figure 2.5* and *2.6*, showing the project partners and main stakeholders at various levels (global, national district and community) in Malawi and Tanzania respectively. Also these figures are assumed to be largely self-explanatory. The two operational institutional partners, that work at the grassroots level, are the Red Cross, having volunteers living, and supporting/following up, in the communities; and WFP, that works through the district government by training of extension workers and Red Cross volunteers, in climate services (so-called Participatory Integrated Climate Services for Agriculture – PICSA). (WFP in Malawi also works through NGOs at grassroots level with emergencies). These two institutions work in the same districts and communities, also supported by one CCAFS Officer hired through local affiliated research centres with organising PICSA training. WHO and the MoH have their own agenda and districts that they target for pilot activities, but these activities are lagging behind as compared to the others' (as seen below). The country responsible institutions, DCCMS and TMA, are participating at district and community level in awareness raising activities only.

2.1.2 Progress/Achievements of the Projects

a) Norway 1

The project started in January 2012 and should have ended in January 2016 (annual report covers the period 1 February - 31 January), but it has got a no-cost extension till 31 July 2016. As the project management has added activities with the project developing, it is impossible to assess the effectiveness as per definition, as neither purpose, outcome nor outputs were planned from the outset. It is only possible to assess the achievements against the goal formulated in the Agreement for the project. The project has thus been more of a *process* than anything else. As the project got an extension, there will be no annual report prepared for 2015 (agreed with Norad), but all progress the last 1.5 years will be included in the final report. The Consultant however got some feedback from the project management on some of the main achievements under Component 2 up to 2015, which is enclosed in *Appendix 2*. A brief summary is included below (while an assessment of the budget and efficiency is contained in *Section 2.2*):

Component 1: Strategic Development (for Weather and Climate Services)	
a) Global Framework for Climate Services (GFCS)	The Norwegian funding has been used to support the operations of the GFCS Secretariat, comprising 4 staff (2 administrative assistants and 2 seconded experts). Financial support to the secretariat has sustained various partner meetings (e.g. Partner Advisory Committee, formed specifically to improve coordination, and the Intergovernmental Board on Climate Services). The GFCS Secretariat is also leading the operation of *Norway 2* at the global level, concentrating on the sectors agriculture and health.
b) African Ministerial Conference	This is merely a platform (permanent forum) established in 2010, presumably with a growing interest and support globally, where weather and climate services are "*harmonised and coordinated in collaboration with African Union (AU), the Regional Economic Communities*

on Meteorology and Climate Services (AMCOMET)	*(RECs), governments, non-governmental and civil society organisations and the private sector*". Norwegian support has been used to sustain the secretariat and the "*process*" at large; preparation of project proposals, support to REC in Central Africa; support to NMHSs to develop National Strategic Plans (workshops in 10 countries); pubic awareness raising. The Consultant has difficulty in grasping how the funding has been used, other than supporting the general operational process of AMCOMET, with meetings, congresses and several seminars around the world[13]. Without any details other than a listing of events, it is therefore difficult to assess the outcome of this institutional support (Outcome: "*Increased political leadership in the provision of weather, water and climate information and services".*) It is claimed that AMCOMET "*is increasingly becoming a stronger political voice in policy matter related to the provision and use of weather and climate services*". However, the Consultant notes that, even after 4 years, a key objective in respect of AMCOMET has seemingly not been achieved yet, namely designation as a Specialised Technical Committee (STC) of the African Union. Such a record might suggest weak political commitment to the aims of AMCOMET on the part of its natural policy constituency.[14] During the field visit in the countries, AMCOMET was not specifically mentioned, or obviously related to, as a prominent "actor" in CSs. The WMO nevertheless claimed in the brief meeting with the Consultant that the support has been "*very useful*".
Component 2: Capacity Building for Improved Weather and Climate Services	
a) Data Rescue	Includes digitising of records (scans, films or photos) only being kept on paper. The data is inserted into a standardised Climate Data Management Systems (CDMS), making the data available and understandable within and across geographic regions. INDARE project (covering Indian Ocean Region) includes the CLIMSOFT CDMS (an open source system developed by WMO and UK Met Office). The Norwegian funds have contributed to activities jointly with other funds, and it is impossible to find out readily what exactly the funds have been used for, but this is not considered required. More details are however found in *Appendix 2.*
b) Fellowship Programme	The main activity is the Instrument calibration courses for NMHS staff, and support to students on fellowship programme, increasing the capacity of forecasters and other NMHS staff in member states. So far in the project, these courses have taken place twice yearly supporting 150 NMHS staff to undergo training in French and English.
c) Severe Weather Forecasting Demonstration Project (SWFDP)	23 countries in Southern and Eastern Africa participated in this component. 270 forecasters have been trained in severe weather forecasting and warning services; improved lead-time and reliability of warnings, improved interaction of NMHSs with media and disaster management and civil protection authorities. Additionally the following training in western countries took place, in various topics: 4 forecasters from Tanzania and Kenya in UK Met Office; 7 forecasters in European Centre for Medium Range Weather Forecasts (ECMWF), Reading, UK; 4 experts from Tanzania and Kenya in German Meteorological Service; one expert in USA; 7 forecasters (not known from which countries) attended International Workshop on Verification Methods in India. More details are found in *Appendix 2.*
d) Public Weather Service (PWS)	Development of skills and tools to communicate appropriate weather information to the public. Includes training of meteorological staff for TV presentations; establish social media channels; establishing NMHS websites; workshops; etc.
e) The extension and operationalization of the agriculture-related projects running in	17 countries in West Africa have participated, covered by the so-called "roving seminars" for farmers and fisher folks, simple awareness raising "road show" seminars on weather and climate, risks on crops, improved risk management, etc., with feedback from farmers improving the contents. There have been several roving seminars per country per year, reaching 11,162 farmers and 700 fishermen. Distribution of 4,827 rain gauges to the farmers and 200 flag sets for landing beaches (green, yellow and red, indicating the safety level of going to sea in small boats). Support to, and cooperation with, AGRHYMET (Agrometeorology, Hydrology, Meteorology)[15]. More information about Metagri is found in *Appendix 2*.

[13] It is noted that the official establishment of AMCOMET in October 2011, took much longer than expected. An proposal from the Inaugural Meeting (proposal from Ministers) in October of 2015 suggested AMCOMET to be a Specialized Technical Committee of the African Union (AU). The recommendation is expected to be considered and approved during the AU Summit (endorsement by Heads of State) in July 2016, taking 4 years from establishment.

[14] The STC Inaugural Meeting (proposal from Ministers) in October of 2015 proposed AMCOMET to be a Specialized Technical Committee of the AU. The recommendation is expected to be considered and approved during the AU Summit (endorsement by Heads of State) in July 2016.

15 AGRHYMET is a specialized institute of the Permanent Interstate Committee for Drought Control in the Sahel

West Africa – Metagri-OPS.	One of the countries, The Gambia, was visited by the Consultant during the Review, and meetings were held with the meteorological service, with one group of fisher folks and one group of farmers. Although it was said that the roving seminars (17 held in the country since 2012, with 2 at fish landing sites) have been successfully implemented, there seems to be a challenge regarding the post-seminar activities. There was very little (if any at all) follow-up from the meteorological service on how the information delivered during the training is being used by the beneficiaries. Apart from the radio and TV announcements of weather information, there seems to be no regular formal method of getting climate and weather service information to the end-users for timely decision-making. The meeting with the participants from the seminars however, revealed *some* understanding of the value of weather and climate information and how it can help them make decisions in their daily work. The farmers met with were on the other hand obviously not representatives of the majority of farmers (all educated and being leaders). Rain gauges were distributed to several farmers in the region (living in remote areas), but there was no follow-up to ensure they are installed and used properly and the rainfall information is also not being collected, compiled and analysed by the meteorological service. Amongst the fisher folks, all seem to understand the red, yellow and green flag system at the beach, but most do not understand the links with weather and climate information. There is no formal *regular* contact involving information dissemination from the meteorological service to the fisher folks. There is no cooperation agreement between meteorological service and the Ministry of Agriculture. In The Gambia, some radio listening groups were also established, but no follow up of the groups take place. In general, the meteorological service blames the lack of funding for lack of follow up. As such, the roving seminars seem to be a "hit and run" undertaking when funding is available. The experience from Malawi and Tanzania under *Norway 2* shows that much more follow up is required in order for the efforts to be sustainable and useful in the longer run.
f) African Soil Moisture Project	Cooperation with University of KwaZulu-Natal, South Africa and American George Mason University, in making a soil moisture model operational (since 2013), integrating satellite information. Stakeholder workshops planned in Nigeria and Ethiopia, but not undertaken. Purchase of equipment and soil moisture sensors, installed in 18 locations in four depths by Agricultural Research Center (ARC) in RSA.
g) Climate and Health Project Activities	The WHO-WMO Climate-Health Office (started in 2014 with one full time staff from WHO paid by the project) works with climate-related health risks, where a key issue is for the health community to access, recognise, understand, interpret and apply available climate information. Nothing is reported in 2015 on this component under *Norway 1*.

As there was not a planned logframe for the activities and expected achievements, it is thus impossible to assess the effectiveness of *Norway 1*. This has been *a process* developing as it proceeded, with the Norwegian funding contributing to activities jointly with other funding. Having said that, there are observations, and reporting, that suggest the activities are contributing directly to the goal of the project, e.g. the roving seminars to the *"… amelioration of weather and climate related disaster and to climate change adaptation"* and the strengthening of global institutions to "…*Operationalising the WMO Global Framework for Climate Services".*

b) Norway 2

The Application for *Norway 2* was dated 20.09.2013, the internal decision document ("Beslutningsdokument") in MFA is dated 14.10.2013, and the Agreement between MFA and WMO was signed on 20.10.2013[16] (although the original Agreement document itself is *not* dated). The project in principle started in January 2014 with negotiating and signing contracts with all the partners. This process took 4-5 months for the partners receiving the largest shares of the resources. However, the first PSC meeting was held in Geneva in April 2014 (where MFA was not invited, by a mistake).

The progress of *Norway 2* has been properly recorded in the annual reports (ARs), the 2014 AR being the first presented in a standardised MFA format for "*Progress report for grants…..*". The draft 2015 AR is the first report referring to the logframe that was prepared in 2014 and refined in 2015, and this gives a much better overview of the achievements and progress than the previous format. The draft 2015 AR has a summary listing of the results and then a more detailed narrative description of the various activities undertaken, which is orderly. The draft 2015 AR gives the progress end 2015 (at the time of the Review, not yet approved by Norad). The details of the report will not be repeated below, just a few highlights with

composed of nine member States. It is an interstate public institute with a legal status and financial autonomy.

[16] In the annual reports from *Norway 2*, this Agreement is referred to as "Memorandum of Understanding", which is a clear mix-up of terminology, as a MoU is normally not as strong legally binding document as an Agreement.

reference to the M&E framework presented above, with some comments by the Consultant:

1. National Level: "*National actors have the capacity to design, tailor, deliver and evaluate climate services to support adaptation*":	
1.1 A functioning national governance process is in place for programme implementation	The PDTs have met a total of 12 times in Malawi and 10 times in Tanzania (with 4 meetings in each country in 2015). The Consultant observed that the meeting modalities are completely different in the countries: In Tanzania the meeting lasts max 2 hours whereas in Malawi the meeting lasts 1.5-2 days with much more details being discussed. One reason for this could be the fact that in Malawi some members always have to travel long distances for the meetings, as the GFCS Focal Points (DCCMS) sits in Blantyre, but the other partners in Lilongwe. The Focal Point in Tanzania (TMA) claims that they work in a much more integrated fashion *between* the meetings as all are sitting in Dar es Salaam. The Consultant however believes that the meetings in Tanzania are too short (by judging from being an observer in the April 2015 meeting), with no time to discuss the issues to the detail required. This impression was also relayed by some of the project partners in individual meetings with the Consultant.
1.2 National Framework for Climate Services established	The frameworks are in the process of being established, but as there are no good examples to follow from elsewhere it takes time to refine who should be involved, who should lead the meetings, and simply what such a platform/arena should look like and what its mandate should be. In Malawi, the PDT is now formulating a draft ToR for the Technical Working Group (TWG) on CSs to be established under the National Technical Committee on CC second half 2016, then start developing a "roadmap for CS" largely building on discussion following the MTR discussions in October 2015[17]. In Tanzania, TMA developed a first draft for a CSs Framework in 2015, and a multi-stakeholder task team has been formed to conclude this work and present the framework for endorsement by TANDREC in the first half of 2016.
1.3 The Meteorological Services are able to identify and respond to user-demand for climate services	Malawi: downscaling of seasonal forecast (rainy season) starting in October 2015 to all 28 districts (TA by Finnish Meteorological Institute). Sectoral implications and advisories for seasonal forecast were developed and shared with users (e.g. agriculture and health). Tanzania: the seasonal forecast for the October November December (OND) season in 2015 was downscaled for the GFCS target districts (Longido, Kiteto, Lushoto, Sengerema and Kondoa) in Kiswahili. These forecasts included advisories for health, agriculture and food security, water and DRR. The meteorological service claims that this seasonal forecast will continue in 2016, as they were found very useful by the beneficiaries. The Consultant experienced that such forecasts in both countries were very much appreciated by the beneficiaries at community level, and has really made a significant difference for farmers. The downscaling for the health sector is however lagging behind, amongst other because the sector has not yet any clear picture of its own needs.
1.4 Improved awareness and capacities of sectors (food security, health, DRR) to integrate climate related issues	Health & Climate Core Teams[18] (HCCT) in both countries are reporting increasing awareness of climate relations to health amongst the decision-makers especially at national level (ministries/government institutions), but also partly at district level. The HCCT has been engaged with National Health Measurement Study (NHMS) and drafting Vulnerability & Adaptation (V&A) assessments. Policy briefs have been submitted in Malawi and A National Climate and Health Communication strategy has been developed in Tanzania. It is noted that the DRR sector in both countries in the project are closely integrated with the work in the health sector (being part of the HTTC teams that still are working mostly at national levels). However, in both countries it was observed that the teams are lagging seriously behind schedule, as there seem to be uncertainties on how to proceed with CSs in the sector. In Tanzania, a MoU is drafted between the MoH and TMA to establish procedures for delivery of climate services for the health sector. The HCCCT secretariat in Malawi participated in 2 international seminars in 2015 (Zambia and RSA). At local level, the work related to DRR is closely integrated in the work of agriculture. The baseline study in Malawi however points out that "*… more need to be included in DCCMS/DRR coordination than concentrating on contingency planning only*". The

[17] In addition to building on recommendations from the National Consultations in 2014.
[18] In Malawi referred to as Health & Climate Change Core Teams (HCCCT)

	World Meteorological Day in Nsanje District Malawi (hit by flood in 2015) included sensitisation of the community stakeholders and community in general on climate services and early warning messages. In both countries the sensitisation of communities on climate-smart agriculture in relation to food security is an on-going process (see below). Minimum standards for community "climate-smart DRR" training for TRCS (The Right Climate Stuff) HQ staff was done in Sep 15 by IFRC and the RCRC Climate Centre (12 people), and developed a draft guiding document. The project seems to continuously being capturing feedback from users to improve on the design and delivery of climate products (e.g. through SMS in Tanzania).
1.5 National Adaptation Plans integrate climate service priorities in Malawi and Tanzania, towards improved longer term climate change adaptation.	The Focal Point for the National Adaptation Plan (NAP) has participated in PDT meetings in both countries. Malawi: the HCCCT is developing policy briefs to feed into the NAP process and PDT members were involved in the NAP consultative meeting and stocktaking process in 2015. Tanzania: the PDT is preparing recommendations to the NAP (MoH is one of the agencies included in the Task Team formed in July 2015 to take the NAP process forward). WHO and MoH have developed plans for drafting a Health NAP. This means that the issue of climate services will be integrated in the NAP, a positive achievement indeed.
2. Local Level: "Targeted communities are better able to manage the risks related to climate variability":	
2.1 The design of climate services is informed by clearly identified gaps and needs at the community level	Baseline studies and ICT + radio scoping studies completed in 2014/2015. Needed information for the dissemination activities was provided by implementing partners to DCCMS and TMA. There were obviously quite sharp discussions amongst the research partners (CCAFS and CICERO+CMI) on the scope of the baseline studies during the first year (2014). No compromise was found and WMO did not intervene in the discussion, so in the end two baseline surveys in each country were undertaken and submitted in 2015, far too late as compared to plans. CCAFS hired ICRAF (in Nairobi) to undertake a comprehensive quantitative household level survey in both countries, but clearly leaving out Chikwawa in Malawi, which was a focus district decided by the PDT. This survey was relatively expensive so there are no funds left for monitoring and collecting data later on. Project management also question if it is worthwhile doing such data collection (even with funds available) given that services started at scale only in 2015[19]. In Malawi, a baseline was *neither* done in Balaka District where the main activities have been undertaken. (It was not on the original list of target districts, but WFP decided to shift focus to Balaka due to a risk of overlap with the World Bank funded Shire River Basin Management Programme in Zomba. Eventually, it turned out there was no real risk of overlap as the WB programme was not providing similar services as the GFCS project, so the project is expanding to Zomba in 2016). The Consultant does not really understand why the issue of overlap was not properly looked into from the beginning, as it should have been quite easy to detect. It is also noted that the dissemination of the baseline surveys to the parties has not been appropriate, so far. The two Norwegian research institutions with local partners undertook a qualitative surveys at all levels[20], and have some funds left to do a follow-up study in Sep/ Oct 2016. The Consultant believes that the disagreement between the research institutions on the baseline has been detrimental to a systematic monitoring of the project, and with a lot of funds being wasted on baseline studies. It would have been expected that GFCS project management had decided on the baseline needs related to realistic monitoring activity from the start, and especially related to the M&E framework that was developed. The design of the baseline decided upon should have been according to "need to have" and not "nice to have". **This non-conclusive discussion between the research partners and lack of management decision on baseline and further monitoring data collection is clearly a shortcoming in the project.** On the other hand, such negative learning is part of the risk taken when launching a "pilot", and it is important that this experience is taken on board in the planning of the new phase.

[19] The discussion between GFCS and CCAFS/ICRAF is not concluded by the time of this Review, but the option is to undertake a scaled down study, at a total cost of about USD 40,000 and to collect data only in Tanzania due to the above mentioned issues in Malawi, and the fact that the regular monitoring of field level activities in Malawi is generating quite high quality data already.

[20] "*Establishing a baseline for monitoring and evaluating user satisfaction with climate services in Tanzania*", by CICERO and IRA. In Malawi the Baseline Report was compiled by CMI and LUANAR.

2.2 Strengthened capacity of intermediaries and local institutions, including health and food security workers, to link climate information into action	So far Malawi: 71 intermediaries (mostly district extension workers and Red Cross volunteers) from Balaka, Nsanje and Lilongwe districts were trained in the PISCA method. Training of health workers started in October 2015 with statisticians trained in spatial epidemiology. The work plans for the 2 pilot climate services for health have been finalized with input from the technical support team (Malaria Risk Bulletin, Enhanced Health Preparedness and Planning for Flood events). Tanzania: 178 intermediaries trained (including 107 from Kiteto and Kondoa districts). The training is a participatory process, aimed at fostering co-production of climate services. The process also allows for feedback to be obtained from the farmers both on the training itself as well as on the climate services delivered through the intermediaries. 2 pilot climate services for health have been finalized (Integrated Malaria and Climate Change Management, El Nino Impacts on Health in Tanzania). The Consultant got a very good impression of the training, and surely the on-training of the grassroots beneficiaries is imperative in order to reach the outcomes and goal of the project.
2.3 Targeted households and communities are able to use climate services for the management of climate risks at household level	Overall: the intermediaries have reached around 6,000 farmers, 50% of whom are women. Malawi: 1,708 farmers were reached in Balaka district (1,134 women and 574 men). The trainings have reached 76% of households in the targeted area of the Traditional Authority Kachenga in Balaka district. 804 households had used the extension workers' climate advices to make crop, livestock and livelihood related decisions – representing 36% of households in this targeted area. Farmers opted to plant early maturing crop varieties and drought tolerant crops based on the climate information. In addition, school children report that they educate their parents on the benefits of CSs supported by Red Cross. Tanzania: 4,300 farmers and pastoralists were trained (2,728 in 2015, 1,117 women and 1,611 men) in Kiteto, Longido and Kondoa. Farmers on test plots supported by the Red Cross reported an increase in number of bags harvested. (However the increased crop production was also a result of mechanized ploughing, increased fertilizer inputs, and improved seeds, without knowing the relative contribution of each measure). Malawi: the national Radio and SMS service became operational in December 2015 and currently 4,980 farmers had been reached with agro-climatic information through radio in the TA Kachenga, which represents 80% of the population. Radio Listening Hubs (6 in Traditional Authority Kachenga alone) were established in communities through which the farmers listened to specially designed radio shows (supported by the project through Farm Radio Trust) on agro-climatic information as a district wide approach. 2,140 farmers were reached through FarmSMS. The Red Cross has supported all targeted communities in Nsanje and Lilongwe to develop contingency plans. Community members supported by the Red Cross, who have been allocated responsibilities of disseminating the CSs, have been requesting further information Tanzania: radio services started in March 2016, working with Farm Radio International, paid by the project to design programmes. 3,000 farmers were reached through FarmSMS. In both countries farmers reported plans to diversify their crop production by growing more drought tolerant crops; others reported changes in practices such as engaging in non-agricultural livelihood activities like brick making. Especially the Red Cross is engaging in such non-agricultural development activities (waste clean-ups, tree planting, squatting slab production for latrines, composting, etc.) The Consultant met with several radio listening hubs and farmers and observed that the users (farmers and livestock people) were very satisfied with the forecast services (through radio, SMS and extension workers), which indeed was encouraging. The beneficiaries can now take qualified decisions on planting and crops, and pastures to a much larger degree than earlier. **This is in the Consultant's opinion one of the most useful achievement of the project (together with the PICSA training).**
3. Cross-cutting: "*Improved understanding of the effectiveness of the GFCS in climate risk management and adaptation*"	
3.1 Collection and integration of learning from the programme and effective communication of this to stakeholders	The project produced a total of 11 publications, 9 articles/blog posts and technical guidance material and communications material (2015) and presentations were given at 8 events at the global, regional and national level, including at 2 events at COP21 in Paris December 2015.
3.2 Effective coordination of climate service	Presentations by project partners were held in 8 events related to climate services at various levels in 2015 (COP20-related in Tanzania, WMO meeting in

programmes in the targeted regions and countries	Capo Verde, workshop on weather/climate outlook in Tanzania, stakeholder workshop on CS in Tanzania, MASA[21] Annual general Meeting, and COP21 side event, organised by CMI, CICERO and others). The GFCS Secretariat has received expressions of interest from two countries in East and Southern Africa (DRC and the Comoros Islands) to implement the GFCS at the national level, citing the adaptation programme as an example.

It is noted that only Red Cross work with own volunteers as extension workers in the communities. These are often living in the villages and coming from there initially. They work mostly for free a certain number of hours per week, but get some direct costs refunded. WFP is working through the district authorities, with PICSA training and capacity building, supported by the contracted CCAFS Officer, but do not have staff on the ground. The challenge is that there is a large shortage of extension workers in Malawi (40-50% coverage in several districts); whereas in Tanzania the coverage is quite good in the pilot districts. However, in both countries there are large challenges with transport for the extension workers to go into the villages, both as vehicles and funds for fuel are lacking. This is a never-ending story, and there do not seem to be any obvious solutions to these challenges, as direct monetary support to the district governments is not given. One way out could be to make certain districts "partners" in the project, but financial sustainability will not be there in any case.

The research institutions have been contributing with the following studies/reports:

CCAFS/CGIAR:

- "*What climate services do farmers and pastoralists need in Tanzania*?". Working Paper 110, 2015.
- "*What climate services do farmers and pastoralists need in Malawi*?". Working Paper 110, 2015.
- "*Training Agricultural Research & Extension Staff to Produce and Communicate Agro-Climatic Advisories, to Enhance the Resilience and Food Security of Farmers and Pastoralists in Kiteto, Tanzania. Preliminary Findings from the GFCS Adaptation Program in Africa*". Working Paper no. 132, 2015.
- "*Delivering Climate Services for Farmers and Pastoralists through Interactive Radio*", Working Paper 110, 2015.
- "*Malawi Summary of Baseline Studies: Country Report for the GFCS Adaptation Program in Africa*". Working Paper no. 123, 2015[22]. Notably, the full technical baseline report under the project was undertaken on contract by ICRAF, Nairobi.
- "*Tanzania Summary of Baseline Studies: Country Report for the GFCS Adaptation Program in Africa*". Working Paper no. 124, 2015[23].

CICERO with IRA in Tanzania:

- "*Climate change policy inventory and analysis for Tanzania*". (Report 2015:05).
- "*Establishing a Baseline for Monitoring and Evaluating User Satisfaction with Climate Services in Tanzania*".
- "*Institutional Analysis for Climate Services Development and Delivery in Tanzania*". (Report 2015:02).

CMI with LUANAR in Malawi:

- "'*Global Framework for Climate Services Adaptation Programme in Africa: Malawi 2014-2016. Establishing a Baseline for Monitoring and Evaluation*". 2015.
- "*Malawi: Analysis of Policy Documents and Legislation Pertaining To Climate Change. A Report for the Global Framework for Climate Services (GFCS) Adaptation Programme in Africa*", 2015.

The Consultants finds the individual reports reviewed largely meeting the intentions listed in the Application, also holding a professional standard with relevant contents as to the purpose of the studies. It is therefore understood that the research institutions have largely delivered what was intended. It was also understood from the project partners that the studies had been "useful". However, the researchers claimed that they hardly got any feedback from anyone on their reports, at least to begin with, so they assumed that few of the other partners had really read the reports. This situation has seemingly improved after this was taken up in the partnership. The researchers presented their report findings at the PSC and PDT meetings and got feedback across the table[24], but written comments/feedback from other partners have been lacking all along,

[21] Meteorological Association of Southern Africa

[22] This report consolidates findings from three studies, CCAFS commissioned: The World Agroforestry Center (ICRAF) baseline studies; Farm Radio International on rural radio needs; and ICRISAT, baseline study on the role of ICT-based platforms to scale up climate services for farmers.

[23] Synthesising the three report as mentioned under Malawi

[24] Especially the PDT meeting in Malawi, where the Consultant was an observer, illustrated this. Here the Baseline Study of CMI/LUANAR was presented and discussed.

to judge from the comments from the researchers. The Consultant therefore suspects that the partners have so far *not* been able to make direct use of the deliverables from the researchers in their daily work. Or, they *have* made use of it, but do not go through the "trouble" of giving feedback (time constraints?). This might hopefully change towards the end of the project.

The Consultant would not like to speculate too much on this, but it seems that not having a mechanism in place at start-up or how to incorporate and use the study findings in the project, for example to steer the activities strategically, has been a reason. This is of course best illustrated with two sets of baseline studies that have been prepared. At the time of the Review, there were on-going discussions and hanging issues as to how the baseline studies should be utilised effectively and *how* the further monitoring should take place. (CCIERO/CMI will do some monitoring in 2016, whereas CCAFS has requested more additional funds to follow up the baseline study undertaken by ICRAF). The fact that **WMO did not interfere in the discussion on the baselines at an early stage has been detrimental to the M&E activities of the project.**

In general the effectiveness in the project is *satisfactory*, with the PICSA training of intermediaries and farmers and establishment of radio listening hubs being the most successful. The disagreement and lack of cooperation between the research partners in the project (also pointed at in the MTR) and the lack of ability to solve this is mostly *unsatisfactory*, especially when noting that the baseline surveys were not designed as a strategic tool to monitor progress and effects, and that there are not funds left to do the monitoring in 2016. It is also noted that there are seemingly no funds left to summarise properly the "lessons learned", with input from the partners (that would need some time input to compile such experience. **This is a shortcoming, as such listing of lessons learned should have been a good basis for the design of the next project phase**.

2.1.3 Cross-Cutting Issues

a) Environment

Norway 1 and *2*: Environmental issues are indirectly incorporated in the projects, although not specifically mentioned as a topic in the Application, in the works plans nor in the annual reports. It nearly goes without saying that as the project focuses on the ability of the farmers to adapt to climate changes through better weather and climate forecasts and services, the environmental hazards caused by CC is the underlying cause of it all.

b) Gender

Norway 1: The Application does not mention gender as a special topic, and neither do work plans nor annual reports. The only notable exception is the support to the Conference in WMO HQs on the Gender Dimensions of Climate in Geneva 5-7 November 2014 following a re-allocation of funds supported by Norad (not in the annual work plan). The conference raised awareness and showcased good practices to empower women, as well as men, to produce, acquire and use climate services to make informed decisions in the weather and climate-sensitive areas of food security, disaster risk reduction, water resources management and public health. It gathered meteorologists and climatologists, UN agencies, academic institutions, NGOs, national authorities and country-level practitioners, and women in climate sensitive areas.

Norway 2: All data on farmers trained and reached in the project is gender aggregated. Weather forecasts are important to both men and women, as some crops are gender-related and also there is division of work between men and women that clearly is depending on the weather (sawing, weeding, spreading fertilizer and pesticides). This dimension is taken up e.g. in the PICSA training and in the project in general. There has been a challenge notably in Malawi in ensuring balanced gender representation amongst the intermediaries since most of the targeted districts had few female extension workers. A commendable decision was taken to ensure all available female extension officers participated in the PICSA training of trainers (ToT). It was also noted in Malawi that there was a majority of women in the Radio Listening Hubs, as "*women like to participate in groups*".

c) Anti-Corruption

Norway 1 and *2*: There is nothing mentioned in neither the Applications, the work plans nor the annual reports anything about anti-corruption.

2.1.4 Partner Collaboration in *Norway 2*

The collaboration in *Norway 2* clearly started on the "wrong footing". The Norwegian MFA "forced" the various partners to submit a joint application for funding having all the listed partners on board. There was no expressed preference amongst the partners to form a close partnership at the outset of the project. Although there might have been a sound rationale in MFA for encouraging the partnership as a pilot, this was seemingly not explicitly explained at start-up. Surely, instead of risking several applications for funding from

different institutions related to climate services, dealing with one application would ease administration on the Norwegian side, and also clearly make the funding more "legitimate" as "everybody" is involved and all the activities are integrated. The Consultant would on the other hand not underestimate the value of *piloting* such partnership on climate services, as it had never been done before, and that they presumably could benefit from each other's work in a more integrated way, if cooperation mode had been differently.

The Consultant would conclude that the partnership has not been entirely successful. First of all, the project has been challenged by the fact that there are institutions with completely different agendas and working modalities trying to make joint efforts. There are research institutions, which normally are "service providers" in the sense that they undertake studies and surveys that support the implementation, almost like "consultants". Such institutions should normally not be part of e.g. the steering committee, as this is a clear mixing of roles, when they are part of the decision-making of services for which they have responsibility. The partners also got separate budgets to finance individual activities, with apparently little obvious initial facilitation of cooperation and co-production. .

The MTR also points at the lack of coordinating efforts and combining resources between the partners in implementing the activities. This has also had negative budgetary implications, enforced by the lack of joint budgeting. As each partner had his own budget and defined activities, there was clearly also no incentive to share information on on-going and planned activities, and thus to avoid overlaps. Although clearly the coordination has improved from the start-up, and clearly during the first implementation year, the division of roles and responsibilities between PSC and the PDTs were obviously not clearly understood by the PDTs. (It is understood that the PDTs to start with believed that they had a stronger "saying" in decision-making than was the case, causing some frustration at country level with "PCS interfering in national matters". Such misunderstandings were however sorted out). The MTR also revealed some uncertainties of the role of GFCS/WMO as a global coordinating body.

The two organisations that have operations "on the ground", WFP and Red Cross (RC), also have totally different working approaches, with WFP working mostly with capacity building of district officials whereas RC has hands-on grassroots operations through volunteers in the villages. Having said that, these two organisations are probably the ones that have worked most closely together (supported by the CCAFS Officers), especially through the PICSA training, and the development of radio programmes for farmers, which have been may be the most successful operations in the Project. Their working modalities are to a large extent complementary.

WHO has a special agenda and it has been difficult to integrate this work with the activities related to agriculture, and is not directly benefitting from the work with farmers. Neither is full integration of activities wanted or even required in the opinion of the Consultant. The health component has been a sub-project in itself. WHO works hand in hand with the Ministries of Health in the two countries in the Health and Climate Core teams (HCCT, notably named HCCCT in Malawi). In Tanzania the pilot district of the HCCT (Kigoma) is different from the pilot districts of the agriculture. The health climate services had to start from scratch in the countries and the breaking of new ground has led to delays as compared to agriculture. It was however duly noted that the radio listening hubs would clearly like health information to be included in the radio programmes on agriculture. This should not be so difficult to accommodate in the next project phase.

All the partners report separately in the PSC meetings and the PDT meetings, so the whole feedback modality is very much based on the individual institutions. This is a result of the institutions having been delegated the responsibility as "lead agency" for their activities, and they thus report on only these activities. The exception observed by the Consultant was that WFP and CCAFS had integrated their reporting at the PDT meeting in Malawi, as they also work closely on the ground.

As mentioned in *Section 2.1.3*, the cooperation between the three research institutions has been fairly unsuccessful from the very start. The intention may have been good, namely that all surveys and studies should in principle be co-productions. However, the three have not agreed on common approaches and no co-production at all took place. A lot of time and effort was lost, especially in the start-up phase due to non-conclusive discussions and disagreements between CICERO/CMI on one side and CCAFS on the other.

In the Application for the project, it is stated that *"… under the GFCS for major international players to work together in a coordinated and holistic way*". The project should *"…combine diverse disciplinary traditions to "co– or jointly-produce relevant knowledge*" and that *"…each component can be lead by a single member of the partnership and will be managed separately to facilities efficient mechanisms of working, but with mechanisms top ensure cross-Component linkages*". The various activities have been given a lead agency, also the research-related ones, but the Application does not outline the cooperation approach to be applied in the project in co-productions. Neither was the detailed contents of each study to be undertaken defined in

the Application, just the broad scope, leaving the details to be sorted out later during implementation. In many ways, this seems like a reasonable approach, as all issues may not have been thought of to begin with, as new issues will always come up during implementation, when more knowledge is gained, requiring adjustments to the activities. This lack of "guidance" at start-up has obviously created discussions amongst the researchers in the first year, as they had different conceptions on *what* should be done and *how*.

2.1.5 Monitoring and Reporting Systems

a) Norway 1

Monitoring of the activities at a global level is undertaken by the Project Coordination Unit in WMO supported by professionals from other departments in WMO. (A Scientific Officer from the Climate Prediction and Adaptation Branch in the Agricultural Meteorological Division of WMO has had hands-on role on the roving seminars under the METAGRI OPS, and he accompanied the Consultant on the field visit in The Gambia). The National Meteorological & Hydrological Services (NMHS) in all the participating countries have been coordinating the national activities, and reporting to the WMO who aggregates all national input into a joint annual report.

The annual reports contain fairly brief narratives on the various activities, but there are no indicators formulated against which progress could be measured. The format of the report changed from 2013 to 2014, due to unknown reasons.

b) Norway 2

Monitoring of the activities in *Norway 2* should have been undertaken by TMA and DCCMS in the two countries respectively, but bilateral monitoring meetings are not held with the implementing partners (also pointed out in the MTR), and no joint monitoring visits to the field are taking place. Neither is there any systematic compiling of lessons learned in the countries or globally (only referred to in meetings). The project is overseen by the GFCS Project Officer sitting in Nairobi, doing aggregated reporting to the GFCS Director in Geneva. Then, also the partners with staff in the countries are monitored by, and report through, their own systems (WFP, WHO, Red Cross, CCAFS). It was noted that the CCAFS officers report to the contact person in CCAFS New York, who again reports to the GFCS PO in Nairobi, which seems like a complicated procedure, and might indicate that CCAFS are not used to work as they do in the project. The MTR also commented on the dual reporting causing confusion with the partners regarding the division of responsibilities.

The first Interim Progress Report (covering Nov13-June14) and the 2014 Annual Report (AR) from 2014 followed the standard MFA reporting format *("Progress report for grants from the Norwegian Ministry of Foreign Affairs*"). When Norad took over the project from MFA in 2014, the project management was asked to prepare a logframe, referred to as the M&E framework, with outcomes (named "impacts") and outputs (named "outcomes) and indicators. The 2014 AR contains the logframe table with achievements, but it is noted that this tabular format does not really fit into the MFA format.

The draft 2015 AR follows a new format. The report starts with a summary of achievements against the indicators in a tabular format, which is very orderly and gives a good first overview of the progress last year. This summary is followed by a more detailed narrative description of the activities undertaken, and a list of the reports and publications produced under the project (under "*Outcome 3.1.1")*. Thereafter the project management and M&E activities are described, followed by an updated risk assessment considering both *likelihood* of the risk materialising and the impact if it appears. It is noted that the risk of *delays* has "*high*" on both aspects, and surely delays have plagued the project from the start. The financial management report is enclosed in a separate annex to the 2015 AR. Generally the reporting format and contents is very good, with some minor flaws on the format only (se document management below).

2.1.6 Possible Unexpected Results

a) Norway 1

As activities have been added on to *Norway 1* as implementation has proceeded, one might argue that there have been "unexpected results" from the project, as these were not all planned at the outset of the implementation. However, the adding of new activities has been needs based, and as such they are all assumed to be rather relevant and demand-driven, and thus "expected". It is also concluded that all the activities taken on board, were contributing to the achievements of the formulated goal of the project. However, as far as can be seen from the annual reports, there have been few obvious results/impacts, positive or negative, that were *not* planned in advance. The only issue observed by the Consultant during the field visit in Gambia, was the need for much more awareness raising and support to the farmers on climate and weather forecast and services following the roving seminars, and the lack of follow-up and feedback from the farmers on the reading of rain gauges distributed. But with limited project resources to do

"everything", this as hardly unexpected, and surely not with the meteorological service in the country.

b) Norway 2

There seems to be few *unexpected* results detected in *Norway 2*. As mentioned elsewhere in this report, the activities under *Norway 2* have been much delayed in the start-up phase and only started to gain momentum in the second half of 2015. Especially the health component has taken time to find its form and contents, but this was surely expected, as the concept was new and the activity effectively a "pilot". What most likely comes as a surprise to the project partners at large was the lack of cooperation between the Norwegian research institutions and CCAFS, mentioned above. This was surely unexpected, and seemingly also came as unexpected unresolved complication to the project management. The lack of coordinated and coproduced baseline studies has inevitably given an unexpected impact on the M&E in the project, as this did not end up as "streamlined" as one could have hoped for. One unexpected issue in Malawi could be the inefficient use of funds (time, travelling and subsistence costs) related to the PDT meeting structure, although some implications od this organisational set-up must surely have been realised from the start.

2.1.7 Possible Benefits from the NRC Programme

a) Norway 1

It should be remembered that the NRC Programme of supplying NORCAP expert deployment, was signed between Norad and NRC in August 2015, and *Norway 1* was initially coming to an end in January 2016, now extended to June 2016. Given the process of defining job-description/TOR for such TA, it has simply not been possible for *Norway 1* to utilise this possibility of TA directly in the project. However, a Regional Coordinator of GFCS in Dakar, Senegal came on board in December 2015, and she might be able to support part of the finalisation of the *Norway 1*, although such support has not been planned for, although surely a very positive benefit to the project. This Regional Coordinator should surely play a more active coordinating role in *Norway 3*, West Africa Component, and thus also be a support to secure the outcomes of *Norway 1,* and thereby the work by GFCS in this region.

b) Norway 2

Norway 2 could indeed have requested expert deployment from NORCAP, which could be on board the last project year, but so far has not done that. It seems that this has partly been due to ignorance of the existence of this possibility. It is noted that the meteorological services in both countries could have benefitted from expert deployment for specific tasks, in order to boost the activities. The health component in particular, in both countries, could have needed more hands-on support in addition to the advisor sitting full time in Geneva. Such country support is strongly recommended in *Norway 3.* For the last year of *Norway* 2, it seems to be too late to request any NORCAP support, considering the time for recruitment and the fact that the project will end in November 2016 (in practical terms less than half a year left). If an agreement for *Norway 3* had been concluded, such expert deployment *could* in principle have got on board last half year of *Norway 2* and continued into *Norway 3*. However, as the final project proposal for *Norway 3* has yet to be prepared (and this will take a few more months), no experts would take the risk of signing a contract before this is concluded. Hopefully *Norway 3* will request expert deployment from the NRC Programme immediately once the proposal is prepared and Norad has given the final approval of the second phase. In general, it is believed that the NCR experts deployed will definitely strengthen the continued work of GFCS in general, and in Malawi and Tanzania in specific, and thus also the outcomes of *Norway 2* activities, that eventually are continued into *Norway 3*.

2.1.8 Other Similar Programme/Projects

The Consultant has prepared an inventory of climate-related projects in The Gambia, Malawi and Tanzania (see *Table 2.1a* in *Appendix 1*) in hopes of being able to assess synergy and duplication.[25] The inventory is not exhaustive but is based on references from available project documentation, conversations the Consultant had in the field, and internet-based desk research. The overview confirms that the last decade has seen a significant increase in projects related to climate change in Africa, many of which contain climate service-related components. The inventory includes 20 interventions with total financing exceeding USD 360 million (of which 23% facilitate, develop and/or disseminate climate services products and training). The most significant source of funding is the Least Developed Countries Fund (LDCF) managed by GEF, followed by DfID and the EU's Global Climate Change Alliance (GCCA). There are signs that the Green Climate Fund can become another significant funder.

It is clear that the opportunity for synergies exists (both in thematic and geographic terms), and yet it has been difficult to ascertain from the project documentation the full extent to which these have been

[25] Due mainly to time constraint, but also to data access limitations, the Consultant has focused project data collection on the 3 countries visited and supported by *Norway 1* and *Norway 2*, respectively.

considered. There is, however, some evidence of synergies achieved during implementation, e.g. in respect of the METAGRI/METAGRI OPS projects in The Gambia under *Norway 1*. It is also worth mentioning that WMO secured co-financing for the data rescue subcomponent that led to development of the Indian Ocean Data Rescue Initiative (INDARE), launched in 2014.

The picture that however emerges is more of missed opportunities, for example in the case of the Africa Soil Moisture sub-component of *Norway 1* and (apparently) unexploited linkages with the Community Watershed and Land Management component under the AfDB-financed project, Sustainable Land Management. Moreover, a preliminary review of project documentation reveals few linkages between and among the listed interventions, an issue that is certainly worth a closer donor scrutiny. An important observation relevant to assessment of the application for *Norway 3*, is that, in contrast to *Norway 1* (and to a large extent to *Norway 2*), almost all of the similar programmes listed in the inventory are at least nominally linked to the respective National Adaptation Programme of Action (NAPA)[26].

During the field visit the Consultant learned about similar initiatives that support issues related to climate change, however it was sometimes difficult to obtain accurate information. While it was generally understood by project staff that few initiatives were directly overlapping with *Norway 1* or *2*, this cannot be easily verified by the Consultant since the WMO has not systematically and continuously tracked related activities under similar programmes. There is evidence that, in select cases, emergent risk of overlapping in *Norway 2* was addressed by project management, taking appropriate action. Below follows an illustrative list of interventions in the counties visited (stemming from the inventory of similar programmes contained in *Figure 2.1b*):

The Gambia

- The roving seminars undertaken under METAGRI (2008 – 2011) and the follow up project METAGRI Operational[27] (2012 – 2015) have in fact been co-financed by several other donors, notably Spain.[28] The seminars were undertaken when funds were available. (Notably seminars in Mali, Niger, Chad and Burkino Faso were financed by Greece).
- The Early Warning Project under The Gambia's NAPA (ref. UNFCCC) – "*Integrating Climate Resilience into Agricultural Production for Food Security in Rural Areas*" – is financed with GEF funds under the LDCF and implemented by UNEP. The project aims to enhance adaptive capacity and reduce vulnerability to climate change through i) enhanced capacity of hydro-meteorological services and networks to predict climate change events and risk factors; ii) development of more effective, efficient and targeted delivery of climate information including early warnings; and iii) improved preparedness and responses of various stakeholders to climate linked risks and vulnerability forecasts.
- Training and sensitisation on climate change to rural farmers and communities under GCCA. GCCA support to The Gambia has two components: coastal zone management and the mainstreaming of climate change into development planning, the first of which is especially relevant to *Norway 1*.[29]
- "*Enhancing resilience of Vulnerable Coastal Areas and Communities to Climate Change in the Republic of Gambia*": Implemented by UNDP with GEF financing, the project supports i) policy and institutional development for climate risk management in coastal zones; ii) physical Investments in coastal protection against climate change risks; and iii) activities designed to strengthen the livelihood of at-risk coastal communities.

Malawi

- "*Shire River Basin Management Program*", a component of the World Bank-led project, "*Integrated Flood Risk Management Plan*" scheduled for completion at end-2018. Objective is to improve land and water management for ecosystem and livelihood benefits in target areas. This programme has activities amongst others in Zomba District, and WPF under *Norway 2* did not embark on activities there for fear of overlap. However, as this fear was unfounded Zomba District will be included in 2016 in *Norway 2*.
- "*Scaling Up the Use of Modernized Climate Information and Early Warning Systems in Malawi*", implemented by the UNDP, is one of 8 projects thus far approved in 2015 for funding by the Green Climate Fund. The overall aim is to support provision of early warning weather and climate information systems and improve resilience in 15 districts, but design and planning is at an early stage. The programme proposal refers amongst others to the GFCS project and describes various activities

[26] Although the Consultant cannot ascertain the quality of the respective NAPAs, given that they are anchored in the overarching UNFCCC process, these plans are a logical starting point for any future investment in climate services. Although the health component in Malawi is an exception, *Norway 2* did not have a clear linkage at project level to the NAPAs.

[27] http://www.wmo.int/pages/prog/wcp/agm/roving_seminars/prevMETAGRI.php#overview

[28] The Rockefeller Foundation funded roving seminars in Ethiopia.

[29] Feature story on policy integration progress in Gambia: http://www.gcca.eu/news-and-events/gcca-stories/the-gambia-moves-to-mainstream-climate-issues

strengthening the climate services in the country, including at grassroots level, through both the Ministry of Agriculture and the DCCMS. Dialogue with WFP for possible cooperation is on-going.

- The "*Climate Adaptation for Rural Livelihoods and Agriculture*" (CARLA) project financed by the African Development Bank (AfDB) and scheduled for completion at the end of 2016, was expected i.a. to develop, pilot and replication of a community-based '*integrated climate change and adaptation approach´ in "model villages"*".

Tanzania

- "*Building Climate Resilience, Productivity and Equity in the Drylands*", is a subcomponent of the DfID-funded project "*Building Adaptation to Climate Change in Health in Least Developed Countries through Resilient WASH*". It is implemented by the International Institute for Environment and Development (IIED), with TMA and the district authorities being key partners. The 3-years first phase is about to be completed and the second phase will start during 2016 in Longido, Monduli and Ngorongoro Districts. The first phase has also included information systems for climate services, but the contents of the second phase is not known to the Consultant.
- "*Strengthening Climate Information and Early Warning Systems in Africa for Climate Resilient Development and Adaptation to Climate Change*" is a GEF-financed regional initiative implemented by UNDP and originally scheduled to close in 2015, with a sister component also in Malawi. The project aims to enhance the capacity of NHMSs and environmental institutions to monitor extreme weather and climate change, and to support efficient and effective use of hydro-meteorological and environmental information for making early warnings and long-term development plans.

In general, it is worth noting that GEF, administered by The World Bank, is a major source of environmental funding worldwide. In the recent past, special funds have been established to combat climate change (climate adaption finance) i.e. the LDCF[30].

Additionally, the following programmes could be mentioned:

- FAO's "*Global Information and Early Warning System"* (GIEWS). In operation since 1975, this early warning system is among the UN's first. It's primary purpose is to monitor global food supply on a continuous basis. It is relevant to the GFCS through its considerable distribution channels, which the FAO uses to scale up access to new early warning approaches and technologies.
- *"UN Convention to Combat Desertification*" (UNCCD) dates from 1994 with a mandate to focus on bottom-up solutions to combating desertification and land degradation. National Action Plans are the key demonstration of commitment to convention objectives and The Gambia, Malawi and Tanzania all endorsed theirs in 2000, but there is scant information on progress.
- *"Humanitarian Early Warning Service"* (HEWS). The enhanced version of this GPS-based early warning system was launched by the WFP in 2011, and is designed to provide real-time status and notifications on natural hazards around the world to strengthen preparedness. There are dedicated links to reputable climate-related information sources – and knowledge platforms – administered by e.g. the FAO, USAID (Famine Early Warning System and GIEWS), Dartmouth College (Dartmouth Flood Observatory), and NASA.
- The "*Global Facility for Disaster Reduction and Recovery*" (GFDRR) is a partnership managed by the World Bank Group and supported by 34 countries and 9 international institutions[31] that provides financing (on a grants basis), knowledge management services, and technical expertise. While it has not been possible to ascertain any linkage between *Norway 1* and *Norway 2*, it is noteworthy that the WMO is an official observer of the facility[32].

[30] For instance, GEF funding to Malawi between 2010 and 2016 amounts to USD 21.0 million, which has leveraged an additional USD 85.8 million in co-financing. In Tanzania, the corresponding figures are USD 25.8 million and USD 93.0, whereas in The Gambia, GEF funding in this period is comparable (USD 25 million & USD 94.0 million, respectively).

[31] Ref. https://www.gfdrr.org/who-we-are

[32] It is clear that scope for collaboration with the GFDRR exists, given that 3 of the facility's "pillars of action" converge with the strategic objectives of *Norway 1* and *Norway 2*, namely, risk identification (development of EWS tools and methodologies), risk reduction (dissemination of best practice approaches, training, technical assistance, etc.) and preparedness (climate services, training, etc.).

2.2 Assessment of Efficiency

Efficiency is the measure of how economically resources/inputs (funds, expertise, time, etc.) are converted into outputs. It is thus a measure of productivity.

2.2.1 Introduction

The Consultant has sought to assess the extent to which the financial resources and other inputs made available for the projects were efficiently used to achieve results. Ideally, it should be possible to determine whether the relationship between input of resources and results achieved is appropriate and justifiable. Such an exercise is contingent on the availability of good data, specifically baseline data against financial variables and parameters that have been systematically tracked (collected, collated and registered) throughout project implementation. As far as the Consultant is aware at the time of writing, however, such data is not available for either *Norway 1* or *Norway 2* (at least in a comparable, comprehensive or consistent format). In attempting to measure the size of the efficiency, or utilisation ratio, of the resources invested (NOK 56.8 million and NOK 60 million), the Consultant has therefore employed a more qualitative assessment and the use of proxies, as explained in the following sections.

2.2.2 Budgets and Expenditures

a) Norway 1

The Consultant has worked under a significant data constraint. As noted elsewhere, documentation of progress towards objectives is fragmented, inconsistent and deficient in terms of quality and timeliness. This was exacerbated by haphazard reporting frequency. Some documentation has been available in the form of work plans with budgets, progress reporting and financial statements, although with various degree of useful input (2013 AR (Jan12-Dec-13), with annexes; Interim Financial Report (19.11.2013), with same annex as provided in 2013 AR; 2014 AR, no info; Annual Work and Cost Plan for 2015 (28.11.2014), aggregated budget overview for 2015; 2015 AR, not submitted, will be included in the final report).

It was therefore necessary to construct a cost table on the basis of individual sources and, in the case of 2014, budget data was extrapolated from the previous two-year period. *Table 2.2* in *Appendix 1* presents the result, which is largely self-explanatory. It shows that the sub-components of SWFDP and Agro-related CS (e.g. the roving seminars) constitute around 32% and 25% respectively of the total budget, with GFCS Secretariat taking 15% and AMCOMET 12%.

It is positive to note certain evidence of a growing awareness to enhance cost-effectiveness. The Annual Work Plan and Cost Plan for 2015 refers specifically to the potential to reduce travel costs in order to strengthen the efficiency of resource use: *"Lessons learned throughout implementation will be fed into the evaluation, reducing costs, especially travel costs to too many countries covered."*[33] Unfortunately, no such data is available for assessment, since the project completion date has been extended (presumably this type of information will be collected by the project PCU in connection with project completion).

b) Norway 2

In contrast to *Norway 1*, a detailed work plan with budget covering the entire implementation period, and linked to the logframe, was made available for *Norway 2*.[34] A comparative overview of the budget (approx. NOK 60 million) versus actual expenditure by partner organisation is available and forms the most important financial information available to the Consultant for quantitative and qualitative assessment.

Detailed cost breakdowns were not available at the time of the Review. In order to reveal expenditure patterns and provide a basis to assess cost effectiveness and efficiency, it was therefore necessary to extrapolate expenditure categories from the output descriptions in order to construct a standard breakdown of the total budget. Although the extrapolation is subjective (and therefore subject to a margin of error), the Consultant believes the resulting cost- and expenditure-related statistics (in NOK) give an approximate depiction of the pattern of expenditure under *Norway 2* from 2014 through 2016 (projected). *Table 2.3* in *Appendix 1* contains the estimated project costs in relation to expenditure category, geographic area and partner, and the *Figures 2.7 – 2.9* illustrates the figures in diagrams.

The table shows clearly that the end-users attract the least amount of funding, as seen under Part 1 of the table. **Only 21.5% (i.e. workshops, meetings and training) has been directed to activities that would seem to have the greatest potential to empower, inspire, motivate and support the grassroots beneficiaries.** The situation may be *even* more discomforting than shown in the table, since the Consultant

[33] *Annual Work and Cost Plan – Year: 2015* (WMO PCU, 28 November 2014)
[34] Reference "Year 2 plan revised March 2016 Final" (WMO PCU, provided 4 May 2016)

has not been able to distinguish between participants (e.g. government officials vs farmers and fishermen). Compare this to the high spending level on services, which exceeds half of the total funding. When excluding the administrative expenses, the proportion of services is 2/3. **At the very least, this situation warrants a closer look at what type of activities are involved under "services" and how they contribute to enhanced resilience at the field level**. Part 2 of the table shows that the global component has received around 20% of the budget, with the rest being distributed equally to Malawi and Tanzania. Part 3 shows that WFP has received the largest portion of the budget (22%), which in the consultant's opinion is good, as WFP is working directly towards the district and grassroots levels. WHO has received 17%, whereas Red Cross only 6%. Considering that RC works directly towards the beneficiaries with volunteers, this figure seems to be on the low side, especially when the Consultant observed that RC had to cut the activity level in Malawi in 2016 due to lack of funds.

Expenditure figures or the years 2014 and 2015, and expected expenditures for 2016 (as given in the final "Work and Cost plan for 2016") clearly illustrate the delay of the project mentioned several places in this report, especially during the first year. In 2014 only 15% of the total project budget was spent, and in 2015 32.5%, meaning that half of the total project budget is planned to be spent during the last year of implementation. Surely, momentum of the activities have really increased during the second half of 2015, but it is doubtful whether all the project partners, notably WHO which is seriously lagging behind schedule, will be able to spend their total budget within the allocated implementation period. In case there are remaining funds at the end of 2016, may be such could be transferred to the Phase 2 budget for WHO, and thus be included in the allocation that eventually WHO will get under *Norway 3*[35].

In general, financial accountability and budgetary control is hampered by (i) insufficient financial detail, e.g. in terms of expenditure category (figures are aggregated and the underlying data is unavailable), and (ii) lack of a standardised reporting modality for the multiple project partners.[36] Apart from rendering the monitoring of project expenditure against budget unnecessarily difficult, these deficiencies have hampered the Consultant's efforts to calculate cost effectiveness and efficiency. There is clearly scope to improve accountability by strengthening the monitoring systems.

As presented in the section below on cost-efficiency, a common and useful proxy is the ratio of administrative (or project management) costs to project expenditure. It is a measure, however imperfect, of how economically resources have been used to achieve results. As displayed in *Table 2.4* in *Appendix 1* the total costs associated with project management and overhead (these two budget items are separate but not defined in the available documentation)[37] amount to NOK 15.6 million, corresponding to about 1/4 of the total project costs. While this would appear to be excessive (especially in the first year of project implementation), the Consultant lacks detailed information on specific activities and amounts associated with these budget items (e.g. how much of this covers regular salary, travel, or per diem?). It is difficult as a result to ascertain exactly whether these funds have been used economically, which is in itself quite unsatisfactory and runs counter to the principle of accountability.

Every partner has been allocated both overhead and programme management budgets over the implementation period, with some marked variance. As *Table 2.5* in *Appendix 1* shows, the WFP and CCAFS have been comparatively less costs on management and overhead (9% and 15% respectively than the other partner organisations (in particular as compared to the Norwegian partners with around 1/3).

2.2.2 Cost-Effectiveness.

a) Introduction

There is no simple way to measure cost-effectiveness for *Norway 1* and *Norway 2* and to compare it to alternative interventions, and the Consultant has also had difficulties in determining whether the relationship between resource input and results achieved have been appropriate and justifiable. Below is therefore a

[35] Given the interdependence between *Norway 2* and *Norway 3*, any unspent funding under *Norway 2* could reasonably be re-allocated to possible new funding for *Norway 3*, e.g. in the form of project preparation funds (see Chapter 3, Recommendations).

[36] At the April 2015 PSC meeting, it was agreed that the WMO would "work with NORAD to revise the format for progress reports and share with the partners for their approval." The issue was not followed up in the subsequent PSC meeting in October 2015.

[37] In response to a query from the Consultant, the GFCS PO has explained: "*Programme management costs are costs that are directly related to the implementation of the programme. The WMO PM line for instance includes the Project Officer salary, travel costs for project related travel, costs related to the organizing of the Programme Steering Committee meetings and some M&E and communication related costs. The overhead goes towards the supporting functions in WMO, our accounting, logistics, administrative and legal departments and staff who support the project, and senior staff involved in the oversight of the project.*"

rather subjective "cost-effectiveness" determination based on the strategic objective, which, in the case of *Norway 2*, arguably should be measured in terms of delivering "climate services" (including all elements of risk reduction resources, tools, techniques, training, and methodologies encompassed by the intervention) to subsistence farmers, fishing communities and rural communities ("target groups").

A basic way of making this determination is calculating the cost in relation to the total number of persons reached in the target group, the total number of workshops organised at the field level, etc. The challenge in this case has been to track resources used exactly for these purposes and collate the associated statistics. Unfortunately, the Consultant has not been able to obtain this data.

A rough appraisal has nevertheless been made in the following use of two ratios:

i. the ratio of annual administrative expenses (programme management, overhead and related administrative fees) to the total amount of *funding committed* and *available* during the same year; and
ii. the ratio of administrative expenses during a year to the total amount of project expenditure at the end of the same year.

The first presents a relation between cost and products, without accounting for the significant differences in timing between input and output (committed funding). The second relates annual costs to the stock of impact-producing products (expenditure). While time has not allowed for comparison with other similar programmes, it is possible to compare the ratios over the project period, as shown below.

In respect of ***Norway 1*****,** at first glance, the ratio of administrative expenses to committed funding and expenditure, respectively, seem to be within normal bounds. In fact, the ratios that appear in the table below adhere to the quotient for "project support services" specified in the Agreement. However, as the budget table for *Norway 1* had to be re-constructed by the Consultant, these ratios should be interpreted with caution. Given the inadequacies of financial management in *Norway 1* discussed in *Section 2.5* below, it is likely that programme management costs are incorporated in the corresponding figures, which would substantially increase the ratios.

N1 - Ratio of administrative expenses to:	**2012 + 2013**	**2014**	**2015**	**2016**	**Total**
1. Committed funding (%)	8,7 %	8,6 %	12,5 %	10,4 %	9,6 %
2. Expenditure (%)	9,1 %	9,1 %	10,9 %	10,4 %	9,6 %

Regarding administrative expenses in respect of ***Norway 2*****,** one would usually expect the ratios to lower over time, i.a. as project mobilisation costs incurred in the first stage are absorbed in the succeeding years. In the table below we see that, in fact, the last year (2016) is expected to experience a dramatic increase in the ratio.

N2 - Ratio of administrative expenses to:	**2014**	**2015**	**2016**
1. Committed funding (%)	17,0 %	16,1 %	44,8 %
2. Expenditure (%)	37,4 %	16,8 %	28,5 %

This is an apparent anomaly, which, upon closer inspection of the data source reveals that, in the first two years of implementation, one partner (WHO), had not been allocated funds for programme management (the WMO allocation is also higher in 2016 than in previous years). By spreading the 2016 WHO allocation across the 3-year project period, this produces a more balanced distribution, as presented below. As demonstrated here, the impact of programme management costs can be disproportionate, and it is noteworthy that allocation is quite uneven across partners and years (this issue has been discussed in a previous section on expenditures/budgets).

Ratio of admin expenses to (WHO adjustment):	**2014**	**2015**	**2016**
1. Committed funding (%)	23,0 %	22,2 %	32,7 %
2. Expenditure (%)	51 %	23 %	21 %

The size of programme management/administrative costs has a clear and interesting impact on how economically the funding is translated into results on the ground. It begs the question of what contribution (financial or in-kind) the various partners are making in delivering climate services to the target group? The Consultant is not aware of any co-financing from these partners (although such funding is forthcoming in select cases from donors, such as DfID), and would recommend that this issue is considered in future in the context of aid effectiveness, project ownership, amongst others.

b) Norway 1

Again it is difficult to assess the cost-efficiency of *Norway 1*, simply because there was not proper planning of the activities from the outset of the project, although the budget was set. The project has supported a *process* of establishing GFCS and AMCOMET, also supporting staff salaries in GFCS. In addition, concrete awareness raising and capacity building activities have been arranged in 17 and 22 countries (Roving Seminars and training of forecasters and communication with media respectively). With a reference to the interviews of the final beneficiaries in Gambia (farmers and fishermen), the events were "useful".

However, by judging from the observations in *Norway 2* in Tanzania and Malawi, it is evident that also the countries in West Africa would need much more follow-up and re-addressing of the issues in order to be able to fully utilise the newly acquired knowledge on climate and weather forecasts. One should also recall that in *Norway 2*, capacity has been built and support given also to the meteorological services at country level, as well as at district level, in order to be able to supply services (e.g. short-term forecasts) for the beneficiaries to act accordingly, whereas such in-depth national support has *not* been given in *Norway 1*.

Where *Norway 2* has gone in *depth* in 2 countries, *Norway 1* has gone in *breadth* in 17. It is assumed that countries in West Africa are not so unlike countries in East Africa in this respect, so again much more support would be needed in most of the West African countries to obtain the same effect as in East. One example is the distribution of rain gauges in *Norway 1*, where no system for systematic feedback from the farmers of the recorded rainfall data, or collection of such by the meteorological services, has been instigated. A lot more must be done in order for this rain gauge reading to be useful. It is therefore concluded, with the relatively meagre observation of the Consultant, that the efficiency of *Norway 1* towards the final beneficiaries has not been fully satisfactory, as only 11,160 farmers have reportedly benefitted from the climate services training (meaning only around 650 beneficiaries in each of the 17 countries. This translates into an average cost of approximately NOK 4,800 per farmer as per 2015, in relation to the total cost of the project, or approximately NOK 1,800 per farmer in relation to the cost of the agro-related CS component. Such figures however do not reveal very much in terms of the effect/outcome of the training without a similar project to compare with, figures which are not available.

c) Norway 2

Norway 2 must be considered a "pilot project", although not marketed as such in the application. Especially the partnership constellation created a lot of delays during the first year (contract negotiations and discussion on e.g. baseline survey), but also the concept of climate services was new to the two countries, especially on the health side, and considerable time was needed to get things on track. It is noted that only around 6,000 farmers have been reached so far in *Norway 2* (end 2015, 1,700 in Malawi and 4,300 in Tanzania)), meaning a cost of around NOK 4,760 per farmer, all expenditures taken into account[38]. Considering that the ultimate goal of the project is to support poor farmers and pastoralists, this is a relatively small number of farmers with a relatively high cost per farmer figure over a substantial period of time, although it is in the same magnitude as the *Norway 1* figure. Given these less than stellar results, therefore, **Norway 3 should be planned with the explicit objective of reaching far more farmers at far more cost-effective unit costs**.

Although some funds of course had to be spent at global level and at large on administration and management as this project is a "pilot", the Consultant concludes that the project has been far too top heavy, with too few resources reaching the countries and the grassroots beneficiaries. As such it can show relatively low cost-efficiency, at least towards the formulated objectives of the project. This must surely be changed in the next phase.

A special observed case: In Malawi, the location of the meteorological services in Blantyre has not been efficient, with a lot of time and funds wasted on travel and overnight stays, and a change in this focal point set-up has been suggested for the next phase.

2.3 Assessment of Impact

Impact is a measure of all positive and negative consequences/effects/ results of the Project, whether planned for and expected, foreseen or not foreseen, direct or indirect. Such effects could be economic, political, social, technical or environmental, both on local and national level, primary and secondary[39].

Normally it is too early in both projects to detect major impacts, as such in general often materialises some time after the outputs have been delivered. It should be recalled that the *goal* is also the long-term objective

[38] Expenditure figures from Work and Cost Plan as of end 2015, NOK 28.6 million (NOK 90,073,621 + NOK 19,494,453)

[39] A related term is "outcome", but this is normally used directly related to the *planned* effect of the project outputs.

of an intervention.

2.3.1 *Norway 1*

As *Norway 1* had no logframe established and thus no objectives formulated at the start-up, such could of course not be used for measuring impact. However, as activities were taken on board during implementation as required and needed, some *outcomes* were formulated for individual activities (listed under each activity in *Section 2.1.1*). Also as the project is not fully completed, the impact of some activities is too early to be detected. Having said that, the consultant concludes that all the activities taken on board the project are likely to contribute to the overall goal of the project, as formulated in the Agreement (see above). A few comments to impacts on separate sub-components are mentioned below:

Component 1: Strategic Development (for Weather and Climate Services)

a) Global Framework for Climate Services (GFCS): The outputs have been delivered, the GFCS established and strengthened and is now managing *Norway 2*, which is running fairly well. Also the health component is in the process of being integrated in climate and weather services, with the Climate-Health Office in GFCS established and fully operational.

b) African Ministerial Conference on Meteorology and Climate Services (AMCOMET): AMCOMET has been established, but it is impossible in the Review to see any direct impacts from the written information received. It is also not expected to be able to see a visible impact after so short time, e.g. of the Implementation and Resource Mobilization Plan of the Integrated African Strategy on Meteorology (2016 – 2027), being a roadmap for implementation of the strategy; or on the Strategy and Implementation Plan for the establishment of the Regional Climate Centre in Central Africa (in Cameroun). It is also too early to detect any impact of sub-regional workshop in Nairobi and Cotonou on development of National Strategic Plans, where 21 and 23 countries participated).

Component 2: Capacity Building for Improved Weather and Climate Services[40]

No information on impact reported, except for the info provided in *Appendix 2.* The staff of the meteorological service in The Gambia (Dept. of Water Resources) claimed that their competence had increased related to climate services, and especially on instrument calibration (courses also sponsored by other donors). Surely also, some increased awareness was observed at the beneficiary level in Gambia (farmer and fishermen), although more follow up activities are required to make it sustainable.

2.3.2 *Norway 2*

Project progress was clearly delayed in the first 1.5 years of implementation (also pointed out in the MTR), due to contract and budget negotiations, staff turnover, lengthy recruitments procedures of key project staff, and long discussion, e.g. amongst researchers, on baseline surveys and monitoring needs. In Malawi floods caused delays for the operational partners. Due to such delays, there are of course even lesser chances of detecting any impacts at the time of the Review. Especially in the health sectors, delays have been significant, with TA from International Research Institute (IRI) at Colombia University coming late, and no impacts can be detected at this stage. In general also the Ebola preparedness caused delayed for the health teams.

The Consultant however got a good impression of the effect of the PICSA training and awareness raising activities in Malawi and Tanzania amongst the farmers and pastoralists. In both countries the beneficiaries have clearly started to utilise their newly acquired knowledge and the provided seasonal and weekly/10-days weather forecasts followed by advisory services by the intermediates (extension workers). There are reports of increased crop yields, although it is also clear that there might be other factors contributing to this (seeds, fertilisers, pesticides). The farm radio programmes are very much appreciated, and no doubt the increased focus on climate and weather services has contributed to increased resilience of people vulnerable to the impacts of weather and climate-related events. This is especially the case in Malawi, where they have drought and floods in various parts almost simultaneously. It is therefore concluded that the project is on the way towards achieving the goal. However, more follow up and support is needed to be able to reach a reasonable magnitude of scale of beneficiaries. More resources and efforts must therefore be directed to the local levels, especially as compared to what could reasonably be spent at global level for administration. By and large however, the Consultant concludes that the activities instigated in Malawi and Tanzania will surely contribute to the overall objective/impact of the project ("*To increase the resilience of people most vulnerable to the impacts of weather and climate-related hazards*"). This is evidenced through the Review and especially the meetings with the final beneficiaries at grassroots level.

[40] In reports also referred to as "*Development of Technical Capacity and Service Delivery*"

2.4 Assessment of Sustainability

Sustainability is the continuation of benefits from a development intervention after major development assistance has been completed, the probability of continued long-term benefits, and the resilience to risk of net benefit flows over time.

2.4.1 *Norway 1*

a) Sustainability amongst Beneficiaries

It is premature to judge the sustainability of *Norway 1* just based on a 2-day field visit in only one of the 17 countries in which the roving seminars have been conducted. However, the meeting with the fishermen in The Gambia, at the largest landing site in the country, indicated that some are aware of the climate challenges related to weather. The marine forecast received by the beach extension worker is interpreted and the appropriate flag (green, yellow or red) is put up visibly to all. The fisher folks interviewed claimed that they now follow the flags and that there are less accidents at sea due to bad weather not foreseen (no proper statistics exists though, although they claimed that 5 accidents per year earlier is now reduced to 1). Some fishermen are at sea for 10-14 days with larger boats and they regularly phone the extension worker for weather updates. It is believed that this knowledge is mostly sustainable amongst the fishermen directly trained. However, it is also assumed, like any other awareness raising exercises, that refresher training must be undertaken, amongst other as new fishermen are joining the beach community all the time. The fishermen met by the Consultant asked for more training, also with the use of more visual aids, as some fishermen are illiterate, and there are several languages/tribes along the coast in Gambia.

It is estimated that around 20% of the farmers in The Gambia have been reached through any form of awareness raising/seminar. In some villages there has been more than one seminar, but not to the same farmers. The farmers met with by the Consultant were obviously resourceful farmers, who were also lead farmers and heads of various local farmer groups/radio listening hubs. They claimed that they had learned from the roving seminars, and that they now take appropriate actions to adapt to the climate change. However, it was also clear that this selection of farmers met with were not necessarily representative for a "normal" farmer, and that much more awareness raising was needed in order to make it sustainable.

Some farmers are taking up the new techniques and some are not, also depending on the local leaders' ability and enthusiasm to support and give advice. The handing out of rain gauges to remote farmer that are not so often visited by extension workers is not a sustainable practice in its present form. This because there is no proper system for following up and collecting feedback from the farmers on rainfall readings neither by meteorological service nor by district agricultural service (e.g. due to lack of transport, no fuel etc.). Obviously also, there is no agreement between the meteorological service and the Ministry of Agriculture for extension workers to collect such data. Before a much better horizontal communication between the sectors is in place, this is not sustainable. The rain gauges are basically assumed to help the individual farmer to take the right decisions on the day, but obviously much more training and follow up by extension workers is needed to make such localised system effective. Also, the reading of rainfall would be very useful to the meteorological service as basis for future climate/weather predictions.

Also the farmers wanted more information and improved communication with the meteorological service. They also would like more airtime on radio with programmes for farmers. Many farmers have a mobile phone but many cannot read or write and thus cannot read the text messages. Refresher courses are needed continuously, and it was clear that on-learning to other farmers by lead farmers, or by farmers that have participated in the roving seminars, is not working satisfactorily. There is no rolling-out system in place and it is up to the individual farmer to spread the "gospel", and it was said that few farmers come voluntarily to the lead farmers for advice. Some farmers live at remote locations and are not able to come to centralised training events, and the extension services is under-staffed and lack transport. The radio listeners groups seem to be a success, but will the programs continue when the project is completed? Nobody seems to know, but sustainability is surely at risk.

b) Institutional Sustainability

As compared to *Norway 2*, *Norway 1* seems to have achieved far less in terms of the institutional capacity building in the meteorological services, to judge from the information obtained in the meetings in The Gambia. This was also expected, as the funding, and thus activity level, in *Norway 1* is much more spread out in several countries. *Norway 1* seems to have just "scratched the surface", and without more support and capacity building, the efforts are likely *not* to be sustainable in many of the countries. More institutional support is surely needed, and more systematic system of downscaled forecasts is needed. Also more intermediaries (e.g. agricultural extension workers) must be trained in interpreting the seasonal, weekly and 24-hours general weather forecasts that are transmitted (e.g. terms like "normal", "above normal" and "below normal"). Also, little has been done regarding downscaling of forecasts that aim at the health sector (only

related to malaria so far), so much more work has to be done in this field.

2.4.2 *Norway 2*

a) Sustainability amongst Beneficiaries

The intermediaries trained during the PICSA events, being district agricultural extension workers and Red Cross volunteers in both countries expressed satisfaction with the training. Also the farmers met with were grateful for the awareness rising activities and the PICSA training events undertaken by the intermediaries. However, they all expressed the need for more support to new intermediaries/farmers and refresher courses to the ones having been trained. There is an obvious need to continue in order to deliver some results at scale that really makes a difference over larger areas. Some of the farmers will continue with their imported practices based on weather forecasts, and some will most likely not without further coaching. There are few examples of voluntary take up by other farmers through consultation with the lead farmers trained.

The radio listening hubs face a challenge, as they have been used to listen to the weekly radio programme produced with project funds. When the project stops, the future of such programmes is at great risk in both countries, in spite of the Farm Radio International and Farm Radio Trust claiming that they will try to find solutions to continue. Losing this agricultural programme will be serious for the hubs. The Consultant therefore concludes that the sustainability amongst the beneficiaries is only partly in place.

b) Institutional Sustainability

In *Norway 2* the institutional capacity building of the meteorological services in the two countries have been rather good, and they staff clearly expressed their appreciation of this support. With the capacity building in various aspects and at different levels, and with the general focus on climate change and climate services, the meteorological services has also obtained a higher “status” in the countries, as compared to earlier when they lived more in “the shadows”.

More specific, the meteorological services in the two countries both claimed that the CSs and especially the seasonal forecasting that they have started, “must” continue as the benefits of these have been very much appreciated by the district authorities, but first and foremost by the final beneficiaries at grassroots level. The Consultant believes this is true, and observed this during the field visits, because now there will be a *demand* for these services from the districts and various stakeholders. As the importance of the climate services obviously has been recognised by the various donors supporting climate change interventions in the countries, surely there will be an increasing focus on these in the future. Especially in Malawi, the momentum of climate services in DCCMS was noted, where also other donors are involved and initiatives are on-going and planned for. The meteorological service claimed that results from El Nino and the floods and droughts have obviously given the governments an eye-opener for the importance of climate services. This, in addition to the increasing international discourse and focus on the importance such services, will surely bring more national and international support to the services, so institutional sustainability is assumed satisfactory.

WMO at global level has also benefitted largely from the support of both projects, especially the support to staff salaries. *Norway 1* has given general support to the operations and *Norway 2* to the project operations in the two countries. The knowledge and experience acquired through the two projects will not be lost, unless with major staff turnovers. Nevertheless, it is realised that continued efforts on climate services in WMO/GFCS is entirely depending on support from donors (as with most UN organisations). With the focus on climate services in the wake of obvious climate change hazards the last years, the Consultant is convinced that more financial support to GFCS/WMO work will materialise (*Norway 3* could be one).

The Climate-Health and DRR components in the two countries have really boosted the cooperation between WHO and the Ministries of Health, as they work as one entity through the HCCTs. This cooperation will surely continue as it is clearly in the interest of both governments to improve preparedness related to climate changes and health through improved forecasts. The hazards experienced in the wake of El Nino, floods and droughts have “forced” governments to focus on this also post-project. However, as this activity is largely delayed in both countries, much more development work is required before it is fully sustainable, so more external funding is surely required here to support the governments sustaining the present pace of activities. The Consultant however, has no solid proof of upcoming *committed* funding by donors. It is nevertheless believed that even *without* major donor funding, the work will continue with limited government funds, but at a lower pace than when boosted through donor funding.

2.5 Financial Management and Project Risks

2.5.1 Financial Management and Audit System

a) Norway 1

The Agreement signed on 9.12.2011 calls for end-year annual statements of income and expenditure and cash positions.[41] The financial management of the "GFCS Trust Funds" established in WMO as part of *Norway 1* is in accordance with WMO budgeting and financial policy and regulations. In accordance with the Agreement, the first disbursement was recorded by the WMO on 22.12.2011. Only the final financial statement should be externally audited.[42] Sporadic, late and incomplete reporting might suggest weak financial management on the part of both the PCU and the donor during the first 3 years of implementation.[43] To the Consultant, this would, at the very least, suggest inadequate and/or only episodic oversight. Without suggesting that irregularities have in fact occurred, the Consultant believes that such a shortcoming betrays the lack of fiduciary duty (on the part of WMO) and inevitably (and unnecessarily) increases the risk of funds mismanagement.[44]

The Consultant has reviewed a copy of the "*Interim Financial Report*" submitted to the MFA on 19.11.2013, which covers the period from inception (Dec 2011) to 14.11.2013. 7 months later (end-June 2014), the MFA transferred project responsibility to Norad. Thus, WMO did not adhere to the agreed reporting modality (i.e. financial reporting was not submitted in a timely manner) and, in practical terms, the MFA was unable to track "*the use of funds compared to the budget*". However, there is no evidence either that the MFA followed up during annual meetings, which one would have expected. Moreover, it is obvious that the MFA approved the 2012 work plan and budget instead of this reporting.

The Interim Financial Report, which is signed by WMO's Chief of Finance, provides income and expenditure in a standard format, states the cash position as required by the Agreement, and is supported by relevant documentation. This is in line with good practice. The report also includes a summary of the current status, enabling verification by MFA. On the strength of the interim report, MFA approved the work plan and budget for 2014 just before transferring project responsibility to Norad. The Consultant notes that, starting in mid-2010, the WMO Secretary General took steps to strengthen risk management (see *Section 2.5.2* below), yet this does not appear to have benefited the Project in the early stages.

Since Norad took over project responsibility, the WMO PCU submitted financial reporting for 2014 in a timely manner (attached to the 2014 AR from March 2015). This is indicative of satisfactory capacity and routines for financial monitoring and reporting. However, reporting for 2015 has not been submitted at the time of the Review. The final (audited) financial report is expected at end-October 2016, 3 months after Project completion, which was recently extended to end-July 2016.

In its evaluation of 2013 AR, Norad noted that the "*innovative project design poses challenges in terms of results measurement*", which would be relevant as well to financial monitoring and reporting. However, apart from the improved logframe of individual sub-components in Nov 2013, and subsequent agreement on budgetary re-allocations, it is unclear whether any steps were agreed to strengthen results measurement in general, and financial management in particular.

b) Norway 2

Financial management is governed by Article VIII(3)(4) of the Agreement between WMO and the MFA stipulates (i) "*a summary of the use of the funds compared to the budget*" attached to the "*Half Year Progress Reports*", and (ii) annual certified financial statements for the Programme containing income & expenditure figures in addition to the cash position. In contrast to *Norway 1*, financials were to be reported in both CHF and NOK, with conversion rates being the UN operational rate, and should reflect any contribution from other donors. The financial reporting should correspond to the format of the annual work plans to ease tracking of expenditures. It is apparent to the Consultant that the MFA had applied lessons from (its less

[41] Curiously, while the financial reporting covers the period up to 31 December, the work programme year runs until 31 January.

[42] However, the WMO informed MFA in their application that statements are also to be incorporated in the overall audited financial statements submitted by the Secretary General (SG) of WMO to the Executive Council for approval. The Consultant has not been able to verify whether this practice has been followed (WMO financial statements after 2010 are not accessible on the organisation's website).

[43] For instance, a financial report for calendar year 2012 was not submitted. Also, the budget-related reporting presented in the Annual Report 2013 did not harmonise with the original "logframe" and project costing, an issue subsequently raised by Norad.

[44] The external financial audit stipulated by the Agreement should adequately address risk of this type.

successful financial management experience in) *Norway 1*. Article XI stipulates that contributions "*shall be subject to internal and external auditing procedures*" in accordance with WMO's prevailing regulations, which i.a. require annual audited accounts for projects such as *Norway 2*.

The available documentation seems to confirm that the GFCS/WMO has adhered to the reporting schedule set out at inception. In terms of timeliness, only one report, the first half-year progress report, due at end-June 2014, was submitted late (2 weeks after the deadline). Moreover, a review of minutes from meetings and other operational documentation suggests that GFCS Secretariat has paid special attention to improving work planning and budget forecasting. In terms of efficiency, the reporting has been largely in line with specifications (certified by the requisite officials, annual statement subject to internal audit, reporting in dual currency).

The Consultant did, however, encounter a certain discrepancy in the cost and expenditure information received for *Norway 2* (ref. "*Year 3 plan revised March 2016 Final*"). The first sheet in the workbook ("*Programme Budget*"), lists total expenditure for the period 2014-2016 for 6 partners. However, there are in fact 8 "implementing" partners, two of which are national organisations in Tanzania (TMA) and Malawi (DCCMS), respectively, whose funding is denominated in CHF (CHF 540,000 for DCCMS and CHF 495,000 for TMA) and passes through WMO, which then assumes the exchange rate risk. This is different for the international partners where the agreements and transfers are in NOK, as these large international organizations are much better placed to handle exchange rate differences. The way this funding appears in reports can easily be adjusted to remedy this (apparent) discrepancy and avoid any confusion.

In consultation with *Norway 2* partners, the GFCS/WMO has also addressed the budgetary implications of exchange rate fluctuations, without necessarily being able to substantially mitigate the agio losses as reported in March 2016 (approx. NOK 5.5 million). The important thing is to identify risks in a timely fashion and to take reasonable steps to mitigate them. As a result, modalities for better managing exchange rate differences in order to minimize future losses have been agreed. It is also noted that the MTR recommended greater flexibility in funds allocations and opened for "*combination of resources between implementing partners.*"[45] Taking into account the lack of an agreed project budget at inception, sufficient in detail to allow systematic and reliable monitoring over time, these are issues that need to be carefully followed up in connection with *Norway 2* and any future support to the GFCS.

2.5.2 Risk Management

a) Norway 1

Risk management in *Norway 1* is subject to the WMO's internal risk management framework and guidelines. The Agreement calls on WMO to report on any "*problems and risks (internal or external to the Project) that may affect the success of the Project, including actions for risk mitigation*." The WMO's "*Annual Financial Statement 2010*", dated April 2011, describes the organisation's internal control systems, including steps to strengthen risk management capacity in the wake of significant "*matters*" (page 4). A key decision was to establish a new Risk Management Committee to oversee an overhaul of internal control systems.

Nevertheless, the Consultant can verify Norad's observation in October 2014 (ref. "Notat" 15.10.14) that risk assessment and management issues were superficially treated in project design and preparation (see the 2013 AR). The lack of a risk matrix is arguably associated with the overall deficiencies in project design noted elsewhere in this report, in particular the lack of an adequate results hierarchy. Risk reduction and management are addressed in the context of each sub-component, not in relation to the project as such. It is somewhat strange that, in a project where the overriding focus is disaster risk management, the management of risk to project delivery was not critically assessed at the outset.

For instance, an obvious project risk is associated with the use of multiple currencies (while funding is in NOK, costing is in USD and, in accordance with the MoU with MFA, accounting and reporting is made in Swiss Francs), since currency losses can directly affect funding for the work plan. Yet this issue was not addressed convincingly until the inception of *Norway 2* (ref. "*Norway II, Exchange differences*" in 2nd AR).

This deficiency was addressed only after Norad assumed responsibility for the project, after three years of implementation. The 2014 AR (submitted in March 2015), under "Other issues", assesses "*current and emerging risks to project delivery*". However, once again, the analysis is superficial, lacking any systematic assessment of risk factors and mitigation steps, and in fact it comprises a couple of brief narrative paragraphs. Crucially, there is no evidence of any follow up. The draft 2015 AR has nothing on project risks.

[45] The Consultant interprets "*combination of resources*" to mean "leveraging".

b) Norway 2

While the Agreement does not stipulate modalities for risk management, Article VIII(3) infers this responsibility by requiring regular assessment of progress against stated outcomes and an accounting of any deviation and "*problems encountered*". Risk management and mitigation is assessed in the original Application by WMO (Sep 2013), in the form of a "*risk management matrix"*, and in subsequent project reporting it is addressed as a functional component of effective project management.[46].

Specifically, the "*Annex to the Implementation Plan of GFCS – Capacity Development*" (dated 2014) contains an adequate assessment of risk and mitigation plans. Section 2.8 ("*Risk management in GFCS Capacity Development*") provides a comprehensive narrative and includes a summary of specific risk factors. The narrative concludes by stating "*it will be necessary to spend time at the early planning stage of implementation, to identify likely risks and their mitigation strategies*."[47]

Subsequent to this, the GFCS Secretariat assessed "*current and emerging risks to project delivery*" in the Interim Progress Report from June 2015, covering the period 1 January 2015 - 31 May 2015. The matrix is comprehensive and contains a thorough discussion of mitigation efforts, which is followed up in the Annual Report for January – December 2015 (also assessing likelihoods and impacts). Importantly, the MTR[48] highlights 6 "*main constraints and challenges*" that can be actively addressed in the final stage of *Norway 2*, and have particular relevance for future programming. Beyond attention to these specific identified threats to project delivery, there is scope for improvement, primarily in terms of systematic and proactive follow up on the matrix in all progress reporting (both interim and annual). For instance, the latest progress report, covering November 2015 to March 2016 could usefully have addressed efforts to mitigate identified risk factors or discuss emerging risks.

2.6 Other Relevant Issues

2.6.1 Document Management

A large number of documents have been prepared under the two projects, and most of them have been reviewed by the Consultant. Whereas most of the documents are orderly and well prepared, many still have shortcomings in the format which makes navigation in them unnecessarily challenging. Examples:

- Some documents lack paging.
- Some documents have the wrong date (e.g. the draft 2015 Annual Report for *Norway 1*, dated in April 2015).
- Progress/annual reports are listing activities in a different sequence than the annual plans.
- The documents produced by the project management of both projects have a similar design on the front page (with the logo of WHO at the top in *Norway 1* and both GFCS and WMO in *Norway 2*), which makes them easily recognisable. It is also understood that this is a common format used by WMO in all their documentation. Some of the partners are using their own standard formats for their report inputs, and this of course should be allowed.
- Almost *none* of the documents have proper headers and footers that show the title/topic of the document, the date, and the preparing institution on each page. This is important in the case that copies are taken of a singular page (e.g. a table), where now it is impossible to see from which document it has been copied.
- A couple of documents do not even have proper headings on the front page, so it is impossible to say *who*, *what* and *when*.
- Most documents do not have a proper list of acronyms and abbreviations attached, which makes it very difficult for people outside the meteorology "congregation" to follow the narrative of the text without looking then up on the web all the time. (The Consultant wasted a lot of time on such activity).

Rectifying most of the above shortcomings is indeed easy. In any *Norway 3* project, a simple standardised document template should be agreed to from the very beginning, complying with an easy-to-understand-and-follow electronic filing system used by project management and all the countries involved.

[46] The MFA's October 2013 internal decision document on support to Norway 2 includes a brief assessment of risk, and refers to an assessment carried out by the WMO, listing 5 risk factors (ref. section 4.4). The MFA underscores the importance of preparing a risk mitigation plan during the first phase.

[47] *Annex to the Implementation Plan of the Global Framework for Climate Services – Capacity Development,* p12

[48] *Internal Programme Mid Term Review*, WMO, 19 October 2015

3. RECOMMENDATIONS FOR *NORWAY 3*

3.1 Assessment of the *Norway 3* Concept Note

3.1.1 Brief Introduction to the Concept Note

A first "concept note" from WMO was submitted to Norad by the *Norway 1* management on 4 May 2015, only representing a continuation of *Norway 1* activities (5 years, budget EUR 7-10 million, start-up 01.01.2016). Norad responded to WMO in and email 18 June, referring to consultations with MFA., and stated that *"… we would like to see a better coordination or, if possible, cooperation between the number of initiatives that are planned or are on-going related to climate service*s". It was further mentioned that West Africa is not the core region for Norwegian development cooperation, and WMO was asked to *consider* shifting geographical focus to East Africa and the IGAS region[49]. WMO was further asked for a comprehensive result framework, a project limited to 3 years and a reduced budget (with 2/5).

The new Concept Note (CN) is dated 24 Sep 2015 (Version 1.7), and so far Norad has not officially responded. It is understood that Norad wants to await the comments and recommendations of the Consultant in this Review before making a comprehensive assessment internally and give feedback to WMO. It is noted that the CN is prepared by WMO alone, in consultation with the GFCS, but without consulting the partners or stakeholders neither in *Norway 1* nor *Norway 2*. The Consultant understands that the CN was submitted to air some (revised) ideas for a continuation of some of the efforts in the two projects, and instigate a dialogue with Norad on the contents of a continued phase and possible Norwegian funding. As such, the CN is of course not a full-fledged project proposal/project document. However, in order to be able to give useful input to the process, the Consultant will assess it with the eyes of an "appraiser".

The CN starts with quite a comprehensive *Background* section, capturing the underlying basics related to climate change and the need for climate services, Climate Risk Management (CRM), Impact Based Forecasting (IBF), and the information needs at large. This introduction reads quite well and relates to the five pillars of the GFCS: Observation and Monitoring; Research; Modelling and Prediction; Climate Service Information Service; and User Interface Platforms. It concludes that the vulnerable rural communities (coastal dwellers, fishermen, smallholder farmers, pastoralists, etc.) need better weather and climate services, and reminds the reader that the WMO, and the National Meteorological and Hydrological Services (NMHS), already has provided training to thousand of farmers in Africa in the use of climate services to maximise yields, reduce loss and risks and increase food security, and claims it is a need to scale up the efforts to other parts of Africa and other sectors with regional institutions taking the lead in such efforts.

Then the CN makes references to *Norway 1* and *Norway 2* and recapitulates the contents of these projects. Also other initiatives are mentioned, namely: pilot project on Sese Islands, Uganda, related to fishermen in Lake Victoria; a WMO project on training weather presenters to become "climate communicators"; USAID funding to rural communities in the SAHEL; the WISER programme (Weather and Climate Information Services) supported by DfID in the Lake Victoria region; and the CIRDA programme (Climate Information for Resilient Development in Africa) implemented by UNDP in 10 countries[50].

The "goal" of the project is formulated as "*To strengthen the resilience for rural communities in Africa with special focus on fishing and farming communities in coastal and lake areas of West and eastern Africa through the efficient provision of improved climate and weather services*". There are 3 "objectives" formulated for the project (interpreted by the Consultant in fact to be "outcomes" with reference to the terms used in the Project Management Manual used by Norad):

1. "*The Climate Services initiated in previous Norway financed WMO and GFCS investments are sustained and institutionalized as user-driven seamless services and are co-developed and applied by stakeholders mainly in the agriculture, health and DRR sector, particularly humanitarian actors of these sectors.*
2. *The risk of loss of lives and livelihoods caused by severe maritime (including lake) weather events is reduced through improved access to seamless weather and climate information linked to effective impact-based forecasting and risk-based warnings.*
3. *Capacities of the meteorological and user-communities are enhanced across Africa; and awareness of improvements is gained by sharing experiences, documenting methods and approaches, and collecting and distributing lessons learned globally through a knowledge management system*".

[49] Intergovernmental Authority on Development, comprising the countries: Djibouti, Ethiopia, Somalia, Eritrea, Sudan, South Sudan, Kenya and Uganda.

[50] Notably: Benin, Burkina Faso, Liberia, Sierra Leone, Sao Tome and Principe, Ethiopia, The Gambia, Uganda, Tanzania, Malawi and Zambia

There are three main components in the project: i) East Africa - EA (covering Tanzania, Malawi and Mozambique); ii) West Africa - WA (covering Cabo Verde, Gambia, Guinea-Bissau, Guinea, Mauritania and Senegal); iii) Knowledge Management – KM (mostly supporting administration of GFCS globally). Under each of the three, there are "objectives" formulated, and "outcomes" listed. *Figure 3.1* in *Appendix 1* shows the "logframe " of the project as presented in the CN. Each of the "outcomes" is briefly explained in the text of the CN. The CN suggests that WMO should have the lead implementing role in partnership with regional institutions. The total budget of the project is estimated to around NOK 81 million over 4 years (EA-39%, WA-32%, KM-12%), including programme support estimated to NOK 1.6 million.

3.1.2 Overlaps and Synergy with other Programmes/Projects

WMO is recognised as a global leader in the development and dissemination of early warning systems (EWS). But this vital work requires contributions from a wide range of actors and institutions, including local communities, national governments, NGOs, as well as the private sector and the science community. All of these are potential stakeholders and partners for *Norway 3*, which after all operates at the regional, national and local levels[51].

As seen in *Section 2.1.8* above, there are a couple of programmes where there is a risk of overlap in East Africa:

- Tanzania: "*Building climate resilience, productivity and equity in the drylands*", (Longido district). As TMA and the district authorities are key partners in this programme, it is assumed that measures are taken not to overlap activities with *Norway 3* (and *Norway 2* until it ends), but ensure complementary use of funds and activities to secure synergy of the efforts.
- Malawi: "*Scaling Up the Use of Modernized Climate Information and Early Warning Systems in Malawi*". UNDP has approached WFP for possible cooperation, but no concrete cooperation is yet concluded. The UNDP project will operate in 15 districts, but no details are known yet. WFP has indicated that *ideally* they would want to co-implement with UNDP. Alternatively, the *Norway 3* activities should take place in other district/locations than the UNDP project. The Consultant believes that geographical diversion is here the most practical solution, knowing that UNDP normally has its own modus operandi, not necessarily fully compatible with other institutions' way of operating and implementing.

Additionally, as mentioned in *Section 2.1.8,* GEF is a major source of environmental/climate change-related funding worldwide, some having components of climate services. The risk of duplication/overlap is therefore always imminent, so it is important for GFCS and the international and national partners, and Norad, to keep on their radar in the on-going project preparation.

3.1.3 Overall Assessment of the Concept Note

Obviously, there have been a lot of discussions internally in WMO on the contents of the new project as presented in the CN. The CN also bears clear sign of being "piecemeal" planning by people having different interests in pursuing their own agenda and continuing previous activities under *Norway 1* and *Norway 2* respectively both geographically, institutionally and budgetary. Obviously also, WMO had only *Norway 1* in mind when starting the planning. Is it by coincidence that the proposed budget allocations to West and East Africa are identical? To the Consultant it seems that the equal budget allocations to West and East might result from a wish to continue both projects and thus satisfy the needs of "everybody".

a) Relevance of Norway 3

The 6 countries under the WA component, and Tanzania and Malawi under the EA component, all were part of *Norway 1* and *Norway 2* respectively. For sustaining and extending the achievements in these projects, there is indeed a need for continued efforts in all the countries participating in the first phase of the projects, as mentioned above. Due to the limited knowledge of the needs in the 17 countries that took part in *Norway 1* (roving seminars), as only one country was visited, the Consultant would not comment on the choice of the six countries in which activities have been proposed continued in WA. The needs are assumed large in *all* countries, although development has reached to different levels in them, and it is clear that continuing with so many countries as in the first phase surely is impractical, as it would e.g. require significant administrative and coordination efforts. As seen below, the Consultant is very much in favour of *concentration*, and the

[51] WMO is in fact one of 3 key United Nations agencies that support many national EWS. The other two are the UN International Strategy for Disaster Reduction (UNISDR), which serves as the focal point in the UN system for the coordination of disaster reduction, and the UN Office for Coordination of Humanitarian Affairs (OCHA), which is also heavily involved in the coordination of humanitarian assistance. The UN Environment Programme (UNEP) is another useful partner in this work, which primary role is to disseminate the latest scientific knowledge and ensure that it informs decision-making, as well as to help raise awareness among the public and inspire local action.

selection of countries listed in *Norway 3* might be as good as any, and are assumed to have been thought out well by WMO, based on the experience with the previous work. Relevance, related to needs, is therefore considered good regardless of how one looks at it! Nevertheless, it is believed that in order to be able to go into more depth also in WA, the number of countries here should be reduced, say to 3 (see below).

The goal and formulated outcomes of the CN are in line with the Norwegian development cooperation policy. They build on the previous two Norwegian-supported projects, which were also fully in line with the sentiments and objectives of Norway, supporting smallholder farmers and fishermen to increase adaptation ability and increase food security. In general, the objectives are in compliance with development policy of all "like-minded" donors, and "everyone" in fact can endorse the objectives.

Notwithstanding the overall objectives, the Norwegian support in *Norway 1* aimed amongst others at establishing the GFCS Secretariat and further strengthening it through implementation of activities in *Norway 2*. It is therefore a surprise to the Consultant that the project is *not* suggested implemented under the GFCS, but under WMO directly, like *Norway 1*. As such, the suggested implementation modality is *not* in line with Norwegian development policy in the sector, as the previous support to GFCS also implicitly would mean that GFCS should be the natural implementing lead partner of *Norway 3*. The Consultant would therefore urge that this is taken on board the further planning and design of the new project.

As regards selection of counties in *Norway 3*, the WA component does not include any focus countries for Norwegian bilateral development cooperation. The EA component comprises Malawi, Mozambique and Tanzania, all focus countries for development cooperation.

b) Logframe of Norway 3

The logframe does not read well (*Figure 3.1* in *Appendix 1*), as it is not really a proper logframe in the sense of the word used in development cooperation planning in Norad. The Consultant has tried to make sense of the various level objectives listed and the outcomes. Surely there is a logical hierarchy of the three overall objectives, whereby e.g. the "*capacity enhanced*" (Objective 3), might lead to "*sustained investments*" (Objective 1), which again might lead to "*reduced risk of losses*" (Objective 2). The project goal could still be valid (leaving alone the fact that it is formulated as the main *activity* that the project is all about). It is also noted that the three main objectives are just repeating the objectives under each component, which makes the whole design confusing. This is illustrated in *Figure 3.2*.

It is not within the Consultant's mandate to formulate a logframe for the project, which really is a participatory process where the main partners/stakeholders should be involved. However, a quick attempt has been made to formulate an example on how it *could* look, illustrated in *Figure 3.3* (which could also be distributed to the partners). In the figure, the Consultant has introduced some new formulations, but kept the meaning of the existing ones, and used consistent terminology that is common in development interactions supported by Norad (outputs, outcomes, purpose). It should be noted that a "rule" is that the *goal* should be as "close to" the *purpose* as possible, meaning that the purpose should have a major contribution to fulfilment of the goal, in addition of course to other aspects outside the project influencing on the goal. The illustration could hopefully be used as input in the further planning of the project.

c) The Planning Process of Norway 3

The Concept Note was prepared by WMO alone (in consultation with GFCS), without i.e. consulting the national partners in the two countries under *Norway 2*. As such the initial planning is also top-down in this phase, which in principle should be avoided at this stage and in such projects in general. The CN bears signs of having continuation of *Norway 1* as main focus (which it was in the first CN from May 2015), but at the same time continuing and extending some activities in *Norway 2*. Having said that, WMO is of course free to suggest anything to the donor. In this case however, it is noted that the CN was submitted *prior to* the *Norway 2* PSC meeting in Lilongwe in October 2015 (where the findings in the MTR were discussed and the contents of a possible next phase was aired), having representatives from Tanzania and Malawi, without the CN being shared or referred to at all in the meeting. This was rather unwise of the GFCS and WMO. When the existence of the CN was eventually revealed in the PSC meeting in April 2016 in Geneva, and in the following PDT meetings in both countries, it created some "confusion" amongst the partners/stakeholders and raises concerns as to the credibility of the planning process[52].

This "mishap" also strengthens the impression that WMO had *Norway 1* in focus when preparing the CN, although Norad has clearly recommended WMO to *consider* concentrating on East Africa. Although the

[52] The GFCS Project Officer however promised to share the CN with the PSC. The Consultant does not know if the CN really was shared.

WMO recalled that the CN was just a first attempt to start a discussion on a next phase, the lack of openness in the idea stage did clearly not create the required *confidence* of the partners/stakeholders in the two countries of the planning process being on right track. In the opinion of the Consultant the planning started somehow on the "wrong footing" and WMO will inevitably have to revise the project based on the inputs from the countries (PDTs) in the next round. Especially the fact that WMO wants to take the lead in *Norway 3*, and not GFCS, and the fact that this was hidden from the stakeholders, does not look good.

In the April 2016 PDT meetings the two countries were asked to start a planning process for a possible Phase 2 of the national activities, with a first draft ready in June 2016, and which would then feed into the EA component of *Norway 3*.

d) The Budget of Norway 3

As mentioned, the budget bears signs of giving equal budget distribution to West and East, rather than being based on a detailed needs assessment. The MFA in Norway has seemingly indicated that they could consider supporting a continuation of the efforts in climate services with allocations in the same magnitude as previously in the project, meaning around NOK 20 million per year. This is obviously the background for the total budget ending up with NOK 80 million in total over 4 years as shown in *Table 3.1* in *Appendix 1*. The operational part of the budget is equally split between West Africa (*Norway 1* continuation) and East Africa (*Norway 2* continuation).

Based on the limited amount of information available, the Consultant has the following comments to the suggested (preliminary) budget (provided in a separate Excel sheet dated 24 September 2015):

- The operational part of the budget is fairly equally split between West Africa and East Africa. The budgets for EA and WA, respectively, share the same impact and, to a lesser extent, outcomes, whereas activities at the level of output are tailored differently, as one would expect given differentiated needs, operational conditions and priorities.
- The costing of activities as presented corresponds directly to logframe elements (outputs, outcomes and impact). Such a linkage is necessary, but further disaggregation is needed, as noted below.
- Contingency funds do not appear in any of the documentation provided the Consultant. This should be rectified.
- The programme support cost, at 17% of the total project budget (CHG 1.7 million), **seems excessive, and has increased substantially** from the figure given in the Concept Note for *Norway 3* dated 24 September 2015 (then calculated at 11.5%).
- Programme costs are not clearly defined or linked to specific activities, with only a reference to "*travel and staff WMO*" being found in the Excel sheets provided to the Consultant.

3.2 Recommendations for *Norway 3* Design and Contents

3.2.1 Planning and Design Principles

Based on the statements in the *Norway 3* Concept Note, conclusions from the internal Mid-term Review of *Norway 2* in 2015, guidance from Norad to the first concept note, and the Consultant's finding from the review and own experience and knowledge of Norwegian development cooperation priorities, the following principles for the design of the next phase could be listed:

a) The focus in the next phase must be much more on the processes and activities in the countries, rather than at global level (the global aspect to the intervention logic seems weak). *Norway 1* and *2* are very much top-heavy, and in Phase 2 more resources must surely be allocated to the countries. More focus must also be on the grassroots beneficiaries in order to maximise the involvement of, and benefits to farmers/fishermen and to enhance cost-effectiveness. It is therefore strongly recommended to significantly reduce the global perspective in *Norway 3*, as compared to what was the case in *Norway 1* and *2*, and thus also in relation to what is suggested in the CN of *Norway 3*.

b) More of the decision-making in the project should therefore be closer to the grassroots beneficiaries, meaning the countries themselves should have more "hands-on management" in *Norway 3*.

c) The activities in Phase 2 must focus both on *institutionalising* the national climate services processes and *strengthening* the National Frameworks for Climate Services in the countries where such have been established.

d) Securing food security, good public health and preparedness for climate change hazards and disasters should continue to be the core of the support from Norway, as it is relevant in all respects. More resources must thus be directed to train, raise awareness and support the final beneficiaries, both in submitting the required climate services, support in interpreting the weather and climate forecasts and support in relevant adaptation measures at grassroots level, beyond only giving advice.

e) GFCS Secretariat, already supported heavily by Norway, should have a profound role in *Norway 3*. This is an internationally recognised and supported framework that presumably has more legitimacy amongst stakeholders than WMO alone. However, WMO will necessarily be an important partner in the project

(being the signatory of any agreement involving GFCS).

f) The partnership in the project should reflect the *functions* of the various institutions (see below). Today's partnership in *Norway 2* contains a mixture of grassroots implementers, global institutional partners and research institutions (service providers). Mixing of roles must be avoided in the next phase (notably with the research institutions).

g) There should be a clear distinction between meeting arenas that are connected *directly* to the management and decision-making of the project with its activities, and those that are connected to *general aspects* of climate services related to the development of the National Framework for Climate Services in the countries.

h) Closer TA to the meteorological services is required in Malawi and Tanzania, and hands-on TA to the climate health teams in the two countries could also be useful in order to boost the activities.

The Consultant also notes that the need for support to enhance CS is "enormous", and as such one approach *could* of course be to try to reach as many countries and institutions as possible in the project. It is however strongly advised against spreading the resources too thinly out geographically and institutionally. On the contrary, **the Consultant would strongly recommend Norad to go "in depth" rather than going "broadly",** also being in line with Norwegian development cooperation policy at large. This means that most resources should be put where already good activities and processes have been started to keep up the momentum and roll out more locally, e.g. significantly increasing the number of beneficiaries in Malawi and Tanzania. **This also means that starting activities from scratch in new countries is in general not advisable.**

3.2.2 Proposed Modality of *Norway 3*. Contents, Organisation and Management.

Based on the above principles that should apply for planning a *Norway 3*, the Consultant dears listing the following concrete recommendations for the contents, organisation and management of *Norway 3*, as input to the further planning process:

a) Project Components. Geography

1. The Consultant appreciates that WMO wants to continue efforts in some of the West African countries supported in *Norway 1*. The criteria for selecting the 6 countries specifically (Cabo Verde, Gambia, Guinea-Bissau, Guinea, Mauritania and Senegal) is not clearly spelled out in the CN. With the principle of concentration however, the Consultant would suggest that the number of countries is reduced to a number capable of being handled and followed-up in a practical and realistic way, say 3. The Consultant has no strong preferences of which countries, as the detailed characteristics of the countries are not know. In order to capture different climatic zones, languages and cultures, for example The Gambia and Mauritania could be representative countries. Also Senegal could preferably be included, as the GFCS Regional Office is located in Dakar, and also the Regional Specialised Meteorological Centre (RCMS) is located there.
2. In East Africa the Consultant would suggest that activities are continued in Malawi and Tanzania to reach more beneficiaries there, but that no activities are started in Mozambique. There is more than enough to do in the two countries, with consolidating activities and rolling out/extending activities, and the start-up from scratch in Mozambique would require a lot of managerial support and follow-up, resources that could surely be made better use of for the communities in the two other countries.

b) Project contents and scope

1. The Consultant will not give too firm recommendations regarding the contents and scope of *Norway 3*. Given the positive experience in *Norway 2*, the establishment of the climate services platforms in Malawi and Tanzania would be one major task, and commencing dialogue on that platform should be prioritised. In addition, the roll-out of related PICSA training and follow-up with advisory services to as many farmers/pastoralists/fishermen as possible should be given high priority, as these would be the primary beneficiaries of any Norwegian funding. Moreover, supporting initiatives that enhance food security is consistent with Norwegian development assistance, and is given high priority by the governments of both countries
2. In both countries the process of integrating climate services especially aimed at the needs in the health sector should continue. The Consultant however advisees against taking on board additional sectors until proven/tested systems are established for agriculture and health.
3. As the Consultant observed that the DRR are already almost an integral part of the health and agriculture sector interventions at both national and local levels, these efforts should of course also continue. They are "part and parcel" of the same interventions towards the same goal. DRR is a natural part of whatever measures are planned to reduce the hazards of the people at grassroots level, evidenced by the last years hard weather events.
4. In WA, efforts should go more in depth than in *Norway 1*, based on a clear learning of lessons from Malawi/Tanzania. Almost needless to say, most (all?) countries in WA being part of *Norway 1* needs

support to sustain and expand their activities, but as the funds are limited and the WA countries are not key countries for Norwegian development cooperation, the support here should be toned down, and rather concentrated to fewer countries. It is simply a matter of the Norwegian funding not being able to "win them all". The benefits from the roving seminars must be sustained by proper follow-up and re-addressing the issues by the meteorological services, amongst others through systematically collecting readings from the rain gauges handed out to the farmers, and to continue training of extension workers that could advise farmers on adaptation measures. Could the PICSA training to intermediaries and farmer groups in *Norway 2* be used in WA? Could the good elements in the roving seminars in *Norway 1* be taken on board in EA? Also support to the meteorological services to assist them in the weather and climate forecasts to the target groups should be boosted. May be health services could also gradually be tested out in the WA component?

5. In both EA and WA the establishment of, and support to, radio listening hubs should be continued, and support to farm radios to produce special programmes for farmers, may be combined with health messages (?), should continue. Likewise with the SMS forecast messages, found very useful.

c) Leadership and Partnership

1. The GFCS Secretariat must be the lead implementing agency, and should thus lead the further planning of the project and formulation of the project document. This must be done in close cooperation with the suggested other partners in the project - WMO, WHO, WFP and IFRC, representing the sectors to be continued. In this way the required ownership to the new project and its contents hopefully will be secured.. Although WMO would be a prominent partner in the new project, and noting that GFCS is sitting in WMO in Geneva, it is believed that having the GFCS as lead would give more legitimacy to the project than having "only" WMO as the management partner. GFCS has a wide support and is acknowledged by several donors and other institutions, whereas WMO is "only" one UN organisation amongst others.
2. It is suggested that the main *operational* international institutional partners in *Norway 2* also continue as partners in *Norway 3*, as they all have representative offices and staff in the countries already. They also have large portfolios of activities supported by various donors and the governments, and are aiming at direct support to the final beneficiaries. These organisations are WMO, WFP, Red Cross and WHO, as indicated in *Figure 3.4* for Malawi. (A similar figure could be drawn for Tanzania with the same functions illustrated).
3. The research institutions that were implementing partners in *Norway 2* (CCAFS, CICERO, and CMI) should clearly *not* be partners in *Norway 3*, as their initial mandate and working modality is different from the other partners. As "service providers" they should be sub-contracted on a competitive basis as needs arise, just like any other services providers. As they are "selling services", it is also a clear mixing of roles for them to take part in the management and decision-making of the project as partners. The project management should also be free to choose any competent research institutions, regionally and nationally, to take part in the project, also on a competitive basis. Such competent institutions of course exist and have played a useful role in *Norway 2* (e.g. IRA, UDSM in Tanzania and LUANAR in Malawi, all of which have been supported by Norway over many years). This freedom of choosing will also be cheaper for the project than being bound to use relatively more "expensive" institutions from e.g. Norway and USA.

   In case there is a need to build capacity on climate services in the countries *within* research and education, such could be included in the project under the separate components. For example, if it is a priority for LUANAR, being a research provider in Malawi, but also an educational institution for e.g. extension workers, to build capacity on climate services in their training curriculum, this could clearly be accommodated under the project, but then as a separate capacity building activity. Such support would however not "qualify" LUANAR to be a partner in the project.
4. In the case that CCAFS will no longer be a partner in the project, the two employees in contract for CCAFS/CGIAR in Tanzania and Malawi[53], taking part in the organisation of the PICSA training together with WFP and Red Cross, should be considered retained and made use of in the project, but not as CCAFS employees. May be they could be contracted under WFP? The planning of *Norway 3* should look into possibilities.

d) Institutional Set-up

1. It is suggested that more of the day-to-day detailed decision-making should take place further down the

[53] They both came on board the project around May 2015. The one in Malawi is formally contracted by The International Center for Tropical Agriculture (CIAT Malawi), a research institution eestablished in 1970, as one of the four original research centers in the Consultative Group of International Agricultural Research (CGIAR). The one in Tanzania is contracted by the International Institute for Tropical Agriculture (IITA Tanzania), also affiliated with CGIAR, with HQs in Nigeria.

hierarchy than in Phase 1 of both previous projects. It still means that GFCS must have the overall responsibility for e.g. budgeting and reporting, but that some decisions could be delegated to project staff at the country level. The new project should in any case be far less top-heavy than in the previous phase. The Project Steering Committee in *Norway 2*, which at present discusses and takes decisions on all kinds of implementation details in the countries, should be transformed into a sort of "Global Project Coordination Committee" (working title only), a strategic level of governance where all the partners can contribute to monitoring and providing guidance, as needed, to the GFCS management on the operations. The project-specific functions of the PDTs should be transformed into "National Project Steering Committees" (working title only).

2. GFCS, being the lead implementing agency in *Norway 3*, should maintain close presence in both regions. It is therefore suggested to maintain the position of the GFCS Project Officer, who is conveniently placed in the WMO/GFCS Regional Office in Nairobi. The time allocated to the project from this person could preferably be reduced in Phase 2 (say down to 50%), now that the countries have built up some capacity to implement activities themselves. In West Africa, it is suggested that the GFCS Regional Coordinator (NORCAP recruited) based on Dakar, Senegal, should be the "Project Officer" in this part of the continent.
3. The PDTs in *Norway 2* would not be continued into Phase 2 in their present form, with their present *functions*, now being a mixture of project-specific issues and climate services in general. The functions should be split in two: i) A National Project Steering Committee (NPSC) and ii) a Climate Services Platform (in Malawi referred to as Technical Working Group (TWG) for CSs). The NPSC should *only* deal with issues related to the implementation of the project, e.g. budgets and work plans, progress monitoring and reporting, resources allocations, decisions on research needs, etc. Only the direct partners in the project must be members of the NPSC. All issues related to climate services in general, and in the country context specifically, will be referred to the Climate Services Platform/TWG, and this will be a meeting arena for all stakeholders being involved with, or who have an interest in, climate services.
4. It became clear to the Consultant during the discussions with the partners in Malawi, that the present arrangement with the GFCS Focal Point sitting in Blantyre, whereas the other partners and ministries with which the project is cooperating, all sit in Lilongwe, is not a very practical set-up. This set-up also means a lot of travelling and unnecessary costs to the project (see above), which otherwise could be used e.g. for capacity building of the beneficiaries.

   It is therefore strongly suggested that the GFSC Focal Point function is delegated to the DCCMS's office located at the airport in Lilongwe, meaning one of the Deputy Directors could preferably take this position (i.e. the one that has already taken part on the project activities and thus already knows the background, project progress and prevalent issues). This would be a much more practical arrangement and surely would boost the cooperation and interaction with the partners and especially the focal points for climate services in the other ministries. With the Technical Working Group (TWG) on CS now being established, this GFCS Focal Point should also take part on the secretarial work of the TWG, and even may be chair the TWG meetings, with all members coming from Lilongwe. The Chairman of the (new) National Project Steering Committee could also be this Lilongwe-based Focal Point, but with the DCCMS Director in Blantyre participating and chairing when important issues are discussed, and he would then come to Lilongwe for the meetings.

e) Technical Assistance (TA) and Advisory Services

1. There might be need for some TA to boost the establishment of the Climate Services Framework in the two countries of the EA component. As Tanzania seems to have come the shortest way in this respect, it is recommended that a TA on limited time contract (say 0.5-1 year) is hired to assist the TMA in this and other specific issues related to the project. Such TA could preferably be hired through the NORCAP system under NRC, and will thus bear no cost to the project.
2. As it is strongly recommended that the DCCMS in Malawi transfers the GFCS focal point responsibility to one of the Deputy Directors sitting in Lilongwe, it is recommended also considering some time-bound TA support to that office in coordinating the efforts of the project, and also in the establishment of the TWG on CS that should be hosted in Lilongwe. Also here, a NORCAP expert recruitment should be considered.
3. The full time advisory position of WFP, sitting in WMO in Geneva, is paid by Norway, and she spends around 60% of her time supporting the countries and the remaining time "*ensuring linkages to the GFCS global level processes*". This advisory position in Geneva should be considered discontinued in its present form, when project focus is moved down to the country level and closer to the beneficiaries. In case WFP wants to have an advisory function for climate services supported by Norway, such a position should preferably be located in one of the two countries, to serve both, or alternatively in Nairobi. If a WFP advisor is strongly required in Geneva to cater for the global issues, it should surely be on part time basis, meaning also part time funding by Norway, shared with other projects, and should be gradually

phase out. The Consultant will invite WFP to consider suitable solutions for such follow up closer to the beneficiaries, and present this in the final project proposal[54].

4. A full time WHO advisor is sitting in WMO today, 100% paid by Norway. The Consultant would however recommend putting much more of the resources in health TA support and capacity building in the countries themselves, not spending so much of the resources at global level. Based on the observations in the countries, where the WHO/MoH activities are lagging behind and taking a long time to find their roles, permanent hands-on TA "across the table" in the countries for a time-bound period is assumed to be much more useful than only remote advisory services from Geneva. It could be considered requesting NORCAP for a time-bound TA person to cover both countries, or even one in each countries for some months[55]. Alternatively, it could be considered using the funds initially suggested for an officer sitting in Geneva, to directly hire a TA in the countries (from e.g. WHO). The advantage with a NORCAP person is that it is not drawing financial resources from the project. As with the WFP advisor, in case a WHO advisory service is "absolutely required" in Geneva, it should definitely be part time, shared with other projects.

f) Budgeting and Financial Management

1. Building on the experience of *Norway 2,* and in the interest of validating country-owned strategies, *Norway 3* must ensure a clear linkage to the respective National Adaptation Programmes of Action (NAPAs). This will also reinforce the legitimacy of the existing international framework for climate action (the UNFCCC).
2. As with *Norway 1* and *Norway 2,* the preliminary budget (Excel sheet) for *Norway 3* does *not* provide any further disaggregation. The budget lacks clarity as to the split of funding into specific expenditure categories (services, goods, civil works, salaries, etc.), which means that it will be impossible to accurately and continuously track the ways in which funding is being utilised. This should be rectified pursuant to any agreement.
3. The Consultant therefore would strongly recommend that the project costs be linked to a detailed and sequenced implementation plan, to include standard functional breakdowns that enable adequate financial monitoring and assessments of efficiency and effectiveness over time as appropriate. It is understood that the envisioned partners employ varying accounting systems. Nevertheless, it is the responsibility of the lead agency to develop and enforce harmonised monitoring and reporting modalities.
4. Budgeting, and thus reporting, in Norway 3 should be made both related to *activities* but also related to cost *categories* (admin, travels, salaries, per diem, use of consultants, meetings, seminars, etc.), which ash not been the case in neither *Norway 1* nor *2*.
5. Although it is understood that the funding from Norway is extra-budgetary[56], and is therefore *additional*, it seems that there are costs that more appropriately should be financed from WMO's core budget (which is standard practice in many institutions). This needs to be clarified.
6. The initial budget indicated in the first concept note was EUR 7-10 million (NOK 65-93 million). The feedback from Norad to this note indicated a reduction of the budget to 3/5 of the initial proposal, meaning in the magnitude of max around NOK 55 million, over 3 years (also indicated by Norad). However, the (last) CN indicates a budget of NOK 80 million over 4 years. With an allocation of NOK 20 per year, a 3-year project should then reasonably have total budget of NOK 60 million, inclusive Programme Support Costs to GFCS/WMO.
7. As it is recommended to reduce the WA component from 6 to 3 countries; to exclude Mozambique; and to reduce support to personnel located in Geneva, the Consultant suggests that a relatively larger portion of the budget than suggested in the CN should go to support the implementation of activities in Malawi and Tanzania, with a special focus on supporting activities at the grassroots level (training of and advisory to farmers and fisher folks, reaching substantially more beneficiaries). This type of support has already proved effective and is directly linked to the objectives of *Norway 3*.

   While the Consultant has no magic formula for calculating the distribution of funding for *Norway 3*, a possible starting point for discussion could be the following *approximate* budgetary breakdown: East Africa, NOK 38 mill (64%); West Africa, NOK 12 mill (20%); Knowledge Management, NOK 5 mill. (8%); and Project Support Costs, NOK 5 mill. (8%). It is however stressed that a *preliminary* budget should not dictate the results of a costing exercise (bottom-up). (There is a need to cost properly, and to do that one

[54] The WFP Advisor claims that her presence would be needed for another full year in Geneva, thereafter gradually reduced. She also claims that her task is to support the country officers as much as possible, but states that TA should sit in the HQs amongst other to be "*able to troubleshoot issues at HQs with the different departments*". The Consultant does not contest the statements, but believes that if the TA are not encouraged or, even instructed, to move closer to the countries and beneficiaries, this will not easily happen by itself.

[55] In fact, it is understood that such discussions for TA are on-going at the time of preparing this report.

[56] According to annual financial statements from WMO, bilateral funding for specific projects is by definition extra-budgetary, i.e. in addition to and separate from core budget.

must spend enough time on project design (emphasis on outputs and associated activities to achieve the strategic objective).

8. Although each partner will be allocated a specific budget, efforts should be made in the planning phase to combine resources and budget items where possible (e.g. transport and work in the field).
9. As the need for research and consultancies are probably not fully clear at the start-up of the project, it is recommended that a contingency item is set side in the budget for such activities, clearly not to be used without the consent of Norad. This will also give the project management the flexibility required to take on board unforeseen studies/activities as they arise.
10. As *Norway 1* will end in July 2016 and the new *Norway 3* would realistically start say January 2017, the financial gap in the WA component for half a year must be filled by other funding, from other sources than Norway, to secure continuity and not risking the momentum in the countries to be lost. (This to avoid another round of "patchwork" funding from Norway).

g) Other Issues

1. Norad in their email comments to the first CN mentioned that they would like to see a proposal for a 3-year project. The final CN however has a 4-year project. With the project in both West and East Africa now well underway by the end of 2016, and the next phase to a large extent will be extending and rolling-out the already successful activities, it is assumed that a 3-year project is appropriate.
2. As the Consultant believes that planning of *Norway 3* started "on the wrong footing", and in order to avoid a lot of "to and fro" bargaining between the donor and GFCS Secretariat on the contents and budget of the project, it is imperative that GFCS, in close consultation with the national and international partners (WMO, WHO, WFP, IFRC) in *Norway 1* and *2*, undertakes a proper planning and design of *Norway 3*. An idea would therefore be for Norway to provide some limited financing for such design and preparation stage during second half of 2016, so the project can start full-fledged Jan 2017. This preparation must also properly document the lessons learned from both previous projects and take these on board in the planning (ref. the well-written "Internal Programme Mid Term Review", dated 19 October 2015, which provides an ideal point of departure).
3. In the very beginning of the project, a simple standardised document management system should be agreed to, complying with a simple electronic filing system making it easy to retrieve documents under various categories. All documents produced by the partners should have similar front page that makes it easy to identify from which project they are coming. All documents must be properly dated with the name of the authors and institutions clearly visible. Paging, headers and footers must be inserted on each page.
4. In the design of *Norway 3* going forward, exploring the scope for linkages to existing and planned programmes and initiatives should be prioritised in order to avoid duplication of effort and waste of resources, but also to exploit opportunities for collaboration, knowledge sharing, and enhanced impact. In addition to the two specific projects listed in Malawi and Tanzania, the most prominent among these include the FAO's Global Information and Early Warning System (GIEWS) that provides information on food insecurity; the UN Convention to Combat Desertification (UNCCD); and the WFP's Humanitarian Early Warning Service (HEWS). Often these programmes are linked to specific GEF-funded initiatives that may provide opportunities to achieve synergies with *Norway 3* in many of the countries encompassed by the project.

(Although considered outside the scope of this Review, the Consultant would (for the record) like to mention one alternative option of utilizing Norwegian funds in support of climate services to "*increase the resilience of people most vulnerable to the impacts of weather and climate-related hazards".* That is to consider *not* continuing with a separate *Norway 3* project, but rather to support and reinforce other planned/ ongoing initiatives on climate services in the countries. There are e.g. GEF-led interventions that have been appraised and vetted, and such buy-in would give considerably less transaction costs of the Norad funds, an consequently more would go to support of the grassroots beneficiaries. Under such an alternative it is also an option that GFCS could be given responsibility for one or two components of a larger intervention. This idea will however not be elaborated further here, as it is assumed that too many expectations of a "Norway project" Phase 2 have already been raised amongst the stakeholders of *Norway 1* and *2*).