



FOOD SECURITY IN A CLIMATE PERSPECTIVE ANNUAL REPORT 2014



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Preface

It gives me great pleasure to present the 2014 Annual Report on Norwegian support for food security in the context of climate change. The results that are presented in the report confirm that Norway is one of the leading donor countries internationally when it comes to climate-smart agriculture.

Poverty and hunger are inextricably linked. The knowledge that more than 800 million people go hungry every day has led to the establishment of a number of global initiatives to address this situation. Through our role as co-chair of the Global Alliance for Climate-Smart Agriculture, and by participating in the AU's New Partnership for Africa's Development (NEPAD), Norway plays an active role in these global partner networks.

During 2014, more than NOK 1.2 billion was invested in programmes aiming at increased food security in developing countries. This report shows that Norwegian support provided through bilateral channels including NGOs (61 %) multilateral channels (18 %) and regional initiatives (11 %) is making a real difference for thousands of people.

The report attaches particular importance to three themes: smallholder farmers, private sector development and gender equality. These themes are important in the context of our international development cooperation targets: we know that smallholders produce more than 70 % of total food production in our partner countries. At the same time, we know that smallholders in general, and women smallholders in particular, often suffer from the effects of inefficient value chains, which compound their struggle to make ends meet. Our support is geared towards changing this unacceptable situation. Development aid alone can play only a small part in fostering food security. It can, however, serve as a catalyst for other, larger capital flows. As this report makes clear, private sector involvement in sustainable agriculture is essential for turning the tide. Norway's support is therefore based on recognition of the value of promoting public–private partnerships, as well as dialogue with partner countries to establish enabling conditions and policy frameworks for increased private sector investment.

Promoting gender perspectives in our support for food security is an important part of our effort. Norway's pioneering cooperation with AU/NEPAD on this issue has yielded results in the Comprehensive Africa Agriculture Development Programme (CAADP) – an investment framework for African agriculture. This revised framework was endorsed at the meeting of the Committee of African Heads of State and Government on Climate Change in Malabo, Equatorial Guinea in June 2014.

Food security is vital for sustainable development. It helps to ensure a healthier and better-educated population. It promotes the development of a skilled labour force and considerably reduces the likelihood of national and regional conflicts.

So, are we making a difference? In a word, yes. I hope you find this report encouraging reading. Our support is giving results that are helping people to build sustainable livelihoods.

BØRGE BRENDE Minister of Foreign Affairs Oslo, June 2015



PHOTO: SJØWALL/UTENRIKSDEPARTEMENTET

FOOD SECURITY "WHEN ALL PEOPLE, AT ALL TIMES, HAVE PHYSICAL AND ECONOMIC ACCESS TO SUFFICIENT, SAFE AND NUTRITIOUS FOOD THAT MEETS THEIR DIETARY NEEDS AND FOOD PREFERENCES FOR AN ACTIVE AND HEALTHY LIFE."

Executive summary

The UN World Food Summit in 1996 defined food security as "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life." FAO points to the following four pillars of food security: food availability, food access, utilization and stability.

More than 805 million still suffered from undernutrition and hunger in 2014. The vast majority of these people live in developing regions. In Sub-Saharan Africa, one in every fourth person remained undernourished in 2014. The world's population is estimated to reach nine billion in 2050, requiring a 60% increase in food production. This will put severe pressure on food production systems world-wide, which are already suffering from an exhausted resource base. The challenges are expected to "hit hardest" in regions where poverty and food security are already pressing issues.

Smallholder farmers, of which most are women, make up the vast majority of people employed in global agricultural production. At the same time, this group accounts for half of the world's food insecure people. Further, smallholder farmers in developing countries have limited access to food markets, resulting in loss of income opportunities and loss of food.

The Norwegian Strategy for Food Security in a Climate Perspective (2013-2015) is a policy tool for Norwegian development cooperation. The strategy gives priority to increasing food production, especially by strengthening small-scale climate-resilient agriculture and promoting the rights of smallholders, particularly women. It will also suport and strengthen regional organisation in the agricultural sector. It further intends to promote and strengthen aquaculture and fishery sector. The annual report (2014) pays considerable attention to three topics: smallholder farmers, private sector development and gender equality. The executive summary highlights a few of the initiatives described in the report.

Norway has been working in two strategic pathways to achieve the goals for smallholder farmers and artisanal fishers. One is to support national authorities and their plans for boosting production and food



security. This is sought through international and regional support. FAO, IFAD, WFP and the Global Alliance for Climate Smart Agriculture (GACSA) are central international agencies and initiatives. Regionally, in Africa, New Partnership for African Agricultural Development (NEPAD) is the most important partner on agriculture.

The other pathway is to transfer knowledge and skills to adopt climate smart agriculture practices among farmers. Conservation agriculture (CA) has been one central approach for the Norwegian efforts. Programmes in Zambia, Malawi and Mozambique have reached hundreds of thousands of small scale farmers and have shown good results of increased yields. The Conservation Farming Unit (CFU) in Zambia had, by 2014, reached 181 041 farmers of the targeted 287 000. Yields under CA have increased by 33% and thereby increased the farmers' income. Further, CA tillage practices have contributed to more efficient use of seeds and fertilizers, which have reduced input costs.

Food production and trade represent opportunities for income generation for small scale farmers, national food access and growth of the national private sector. In developing countries, small scale food producers experience challenges to access markets, arising from inabilities to handle demands on qualities and standards, poor logistics and transportation systems and limited price information and negotiation power. The Norwegian response for individual countries to deal with these challenges is primarily directed at promoting public-private partnerships and providing



incentives for private investment, for example by supporting value chain programmes. Support for such initiatives is provided through NORFUND and as development support mainly through the Norwegian embassies.

The Southern Agricultural Growth Corridor of Tanzania (SAGCOT), Tanzania Agricultural Partnership (TAP) and Malawi Agricultural Partnership (MAP) seek to couple food producers and agri-business dealers in a value chain approach. In 2014, SAGCOT expanded from 44 to 71 registered partners, and private sector pledges increased from USD 750 million to USD 1 billion. Under TAP, a total of 2843 agro-dealers have received training in technical and business management skills. The activities have contributed to increased volumes of inputs supplied to rural markets by 15%. Moreover, more than 3000 smallholder farmers have benefited from the rehabilitation of 35 Warehouse Receipt Systems (WRS).

Norway supports the Marine Business Development Programme in Madagascar. The project aims at improving the living conditions for the coastal community of Madagascar, through private sector development based on breeding of algae, sea cucumber and tilapia. In October 2014, the harvest had grown to provide profit above the minimum monthly salary in Madagascar.

Women play a key role in agricultural production and household food security in Africa and account for between 60-80% of food production for domestic consumption. Despite their major contribution to food production, women do not enjoy the same rights and opportunities as men, and they also tend to have limited access to food markets. According to FAO, if women had access and opportunities equal to men, their crop yields could increase up to 30 per cent.

Gender issues are mainstreamed in all projects under the strategy. A number of efforts are also especially focused on women food producers. A new important initiative is support to NEPAD in designing a five-year Gender Climate Change Agricultural Support Programme (GCCASP). The inception phase of the programme was finalized in October 2014. The programme promotes policy dialogue on gender issues with the vision to achieve an effective and more equitable participation of women smallholder farmers,



FIGURE 1: DISTRIBUTION OF NORWEGIAN DEVELOPMENT SUPPORT TO FOOD SECURITY, 2014 The total Norwegian development support to food security projects in 2014 was NOK 1.2 billion. 18 per cent was channelled through core support to the multilateral organizations FAO, IFAD and CGIAR. 11 per cent was channelled to regional initiatives like NEPAD. Bilateral support is directed to individual countries, and accounted for 61 per cent of the support.

youth and other vulnerable groups in development planning and decision-making. The aim is to enable these groups to better cope with the impacts of climate change, and to increase food security in Cameroon, Ethiopia, Malawi, Niger and Rwanda. In 2014, each of the five countries established a secretariate for GCCASP in the Ministry of Gender (MoG). The MoG is responsible for manageing a partnership platform which includes representatives from ministries and agencies working on gender, agriculture and the environment, women's rights groups and farmers' organizations and research institutions.

The Sustainable Land Management Programme (SLMP) 2 in Ethiopia seeks to incorporate women in all aspects of the programme, and at least 30% of the resources allocated for integrated water and landscape management will benefit women. The project also supports women in taking leadership positions in sectors traditionally recognized as women's domain; livestock production management, rainwater harvesting structures, water users associations, improved stove and wood lots development. The programme has entered into the second phase.





FOOD SECURITY IN A GLOBAL PERSPECTIVE

Despite considerable progress in reducing the number of food insecure people in the world, more than 805 million still suffered from undernutrition and hunger in 2014. The vast majority of these people live in developing regions. There are however, substantial variations. Sub-Saharan Africa stands out as the region with least progress in development towards food security for all. This is the only region in the world where the number of hungry people has grown over the last 20 years (from 175 to 239 million people). One in every four people in Sub-Saharan Africa remained undernourished in 2014.

According to a UN prognosis, the world's population is estimated to reach nine billion in 2050. FAO has estimated that feeding the additional two billion people will require a 60% increase in food production. This is expected to put severe pressure on food production systems worldwide, which are already suffering from an exhausted resource base due to issues such as overuse of water, degradation and pollution of agricultural soils, overfishing, and loss of biodiversity. In addition, the UN intergovernmental panel for climate change (IPCC) anticipates that climate change will have profound impacts on agriculture, forests and fisheries due to an increase in variability and mean temperatures and rain patterns, changes in water availability, the frequency and intensity of extreme events, sea level rise and salinization and perturbations in ecosystems. Population growth and the impact from climate change are expected to "hit hardest" in regions where poverty and food security are already pressing issues.

Smallholder farmers, of which most are women, make up the vast majority of people employed in global agricultural production. At the same time, this group accounts for half of the world's food insecure people. Increased food production and enhanced food security require therefore significant efforts to empower smallholder farmers.

Smallholder farmers in developing countries are struggling to access regional and global markets, and thereby lose income opportunities. Explanations are technical inefficiencies in the value chain, weak market negotiation power and poor private sector

DEFINING FOOD SECURITY

At the UN World Food Summit in 1996, food security was defined to exist "when all people, at all times, have physical and economic access to sufficient, safe and nutritious food that meets their dietary needs and food preferences for an active and healthy life."

On the basis of this broad definition, FAO points to the following four pillars of food security: food availability, food access, utilization and stability.

Food availability refers to the availability of sufficient quantities of food of appropriate quality. The availability of food is commonly supplied through domestic production or imports (including food aid). Food access, on the other hand, is commonly understood as the access by individuals to adequate resources (entitlements) for acquiring appropriate foods for a nutritious diet. The entitlement concept refers to the legal, political, economic and social arrangements that provide rights to the use of and ownership of land and resources. The utilization of food refers to the importance of non-food inputs for acquiring food security. It includes the utilization of food through adequate diet, but also addresses the need for clean water, sanitation and health care as necessary conditions for reaching a state of nutritional well-being where all physiological needs are met. Lastly, stability is crucial in order for a population to have access to adequate food at all times. This implies that people should not be put at risk of losing access to food as a consequence of sudden shocks, or cyclical events. Food stability hence requires that people need to build resilience in terms of coping with changing circumstances.

facilitation. According to FAO, one third of all food produced in the world is never consumed. In developing countries, the major part of this loss occurs in the chain from farmer to market. Many business development projects in Africa have failed to create sufficient employment opportunities and value creation for the poor. Enabling developing countries to increase food trade through inclusive and sustainable value chains and private sector development are therefore keys to economic growth, food waste reduction and enhanced food security.

The Norwegian Strategy for Food Security in a Climate Perspective

In 2012, Norway launched the Norwegian Strategy for Food Security in a Climate Perspective (2013-2015) as a policy tool for Norwegian development cooperation with a particular focus on interventions in climate-resilient agriculture, fisheries and aquaculture.

The strategy, developed jointly by the Ministry of Foreign Affairs, the Ministry of Agriculture and Food, the Ministry of Fisheries and Coastal Affairs, and the Ministry of the Environment, is the Norwegian government's most important response to developing countries' demand for greater support for food security and climate change adaptation.

This annual report (2014) will pay considerable attention to three topics that are central in the Norwegian strategy for food security in a climate perspective: private sector development, smallholder farmers, and gender equality.

THE RIGHT TO FOOD

UN Committee on Economic, Social and Cultural Rights says about the right to food: The human right to adequate food is recognized in several instruments under international law. The right to adequate food is realized when every man, woman and child, alone or in community with others, have physical and economic access at all times to adequate food or means for its procurement. The right to adequate food shall therefore not be interpreted in a narrow or restrictive sense which equates it with a minimum package of calories, proteins and other specific nutrients. The right to adequate food will have to be realized progressively. However, States have a core obligation to take the necessary action to mitigate and alleviate hunger, even in times of natural or other disasters.

Norway supports the work with right to food through FAO.





75 per cent of the Norwegian development support to food security (excl. core support) went to Africa in 2014, while 6 per cent went to Asia.



FIGURE 3: NORWEGIAN DEVELOPMENT SUPPORT TO FOOD SECURITY 2005-2014 (NOK MILL.)

The figure shows the development in Norwegian support to agriculture and fishery programmes and core support to FAO, IFAD and CGIAR from 2005 till 2015. Some of the support to agricultural universities is not included. 2013 was the year of the launch of the Norwegian food security strategy, with the vision to increase support to food security by NOK 500 million. Total support to food security in 2014 was NOK 1.2 billion.





The figure shows support to food security as a percentage of the total Norwegian development budget over the ten-year period from 2005-2014. The share in 2014 was 3.9 per cent of a total budget of NOK 31.7 billion.





This chapter will present Norwegian-funded programmes and projects in developing countries, geared towards private sector development, increased food security among small-scale farmers and empowerment of women in the food production sector.

SMALLHOLDER FARMERS

According to the strategy, Norway will:

Act as a voice for the demand for formal and informal rights of small-scale food producers, especially women.

Enable smallholders and artisanal fishers to adapt to climate change and practise sustainable management of their resources.

Improve smallholders' access to improved seed, factor inputs, credit, education and wellfunctioning markets.

Reduce wastage and food losses along the value chain from farmer to market.

According to IFAD, over 2.5 billion smallholder farmers, of whom the majority are women, provide around 80 per cent of the food consumed both in Asia and Sub-Saharan Africa. The small-scale sector is a main contributor to occupation, income and provision of food in developing countries. Yet, despite their importance for the agricultural sector, smallholders are commonly neglected by national policy, and global poverty and food insecurity remain a predominantly rural phenomenon. According to FAO, around 70 per cent of the world's extremely poor people live in rural areas, particularly in South Asia and South Saharan Africa.

By definition, smallholder farmers are resource-poor people who farm around/less than 2 ha, and are dependent on their farm production in order to fulfil basic needs. In Africa, the vast majority of smallholder farmers are women. Smallholder agriculture may include crop raising, animal husbandry, forestry and artisanal fisheries. The farms and fisheries are commonly run by family groups. These families often suffer from low productivity of their lands, leading to food insecurity. Lack of capabilities like knowledge, skills and good health, and lack of physical assets like irrigation, fertilizers and tools are central explanations for the situation. Smallholder farmers and artisanal fishers are also commonly more vulnerable to natural hazards such as droughts and floods, due to limited livelihood options, and are particularly vulnerable to the impacts of climate change.

The ambition in Norwegian development policy targeted at smallholder farmers and artisanal fishers is to reduce costs and labour inputs, make better use of available resources, increase productivity, minimise the risk of crop and harvest failure, and produce in sufficient quantity to be food secure and to achieve increased income.

In order to reach these targets, Norway supports several small and large-scale programmes in developing countries promoting empowerment of small-scale food producers, especially women. The support to smallholder farmers has a strong emphasis on climate smart agriculture (CSA) practices, especially conservation agriculture (CA). These are tools for increasing agricultural yields while building resilience of smallscale farmers towards the impacts of climate change, and at the same time reducing carbon emissions through minimum soil disturbance.

CONSERVATION FARMING UNIT (CFU)

Since 1996, Norway has supported Zambian Conservation Farming Unit (CFU) in the promotion of CA in Zambia and the eastern and southern African region. It is estimated that Zambia has earned NOK 5.7 for every NOK spent on CA.

In 2011, Norway signed a five-year agreement of NOK 171 million with the Conservation Farming Unit (CFU) for the Conservation Agriculture Programme (CAP II). The overall objective of CAP II is to reverse food insecurity and environmental degradation while enabling smallholder farmers to adopt and integrate farming systems that increase productivity and offset existing and future climatic changes. The purpose is to increase the number of small and medium scale farmers in Zambia adopting minimum tillage conservation agriculture practices by 66 000 to reach a total number of 237 000. CAP II also aimed to increase the area under adoption by 167 000 ha to a total of 287 000 ha within a five-year period while maintaining and improving the productivity of existing adopters.

Using Broad-Based Surveys (BBS), CFU has estimated that a total of 177 483 farmers in Zambia have already adopted minimum tillage methods. If the total of mechanised ripping adopters are added, the minimum tillage adoption has reached 181 041 farmers of the targeted 237 000. The mid-term review for 2014, based on BBS, found that yields under CA have increased by 33%, which has further directly contributed to increasing farmers' incomes. Further, CA tillage practices have contributed to more efficient use of seeds and fertilizers, which have reduced input costs. Minimum ripping has contributed to decreasing labour requirements through the elimination of labour-intensive ploughing and hoing.

For the remaining period under CAP II, the main emphasis will be on reducing the financial problems faced by farmers in CA adoption, like input supply

Climate-smart agriculture, forestry and fisheries (CSA)

FAO presented the concept climate-smart agriculture, forestry and fisheries (CSA) at the Hague Conference on Agriculture, Food Security and Climate Change in 2010. It addresses food security and climate challenges and integrates the three dimensions of sustainable development (economic, social and environmental). It is composed of three main pillars:

- > sustainably increasing agricultural productivity and incomes
- > adapting and building resilience to climate change
- > reducing and/or removing greenhouse gases emissions, where possible.

The CSA approach is designed to identify and operationalize sustainable agricultural development, including the technical, policy and investment conditions to achieve sustainable agricultural development for food security within the explicit parameters of climate change. In short – it will enable agriculture to contribute to national green growth targets.

costs, post-harvest management and marketing. Further, efforts towards diversification of services and linkages in value chains will increase by strengthening farmers' linkages with agro-dealers.

Proof of Zambia's important role in spreading CA to African smallholder farmers is the fact that the First African Congress on Conservation Agriculture was held in Lusaka in March 2014. The experiences from Zambia have also contributed to the implementation of the CFU Conservation Agriculture Regional Programme (CARP).

In 2011, Norway signed a five-year agreement of NOK 131 million with the CFU for CARP. CARP works to get small and medium scale farmers to adopt more climate-resilient, environmentally

Conservation Agriculture and Conservation Farming

Conservation Agriculture (CA) or Conservation Farming (CF) is a particular form of climate-smart agriculture designed to achieve increased agricultural yields, preserve soil nutrients and increase carbon content in the soil. CA is considered a sustainable and profitable technology that enables farmers to improve livelihoods, while building resilience towards the environmental hazards caused by climate change.

According to FAO, CA/CF is based on three principles:

- Minimum soil disturbance through minimal or zero tillage (MT).
- > Permanent soil cover (mulching), meaning the protection of soil by covering it with crop residues or other organic compounds (mulch) in order to improve soil biological activity, reverse erosion, and improve water efficiency.
- > Crop rotations (particularly with legumes) in order to reduce pest, disease and weeds and to complement natural soil biodiversity to create a healthy soil microenvironment.

CA holds a large potential for all sizes of farms and agro-ecological systems, but is especially benefitting small-scale farmers, in particular those struggling with a degraded natural resource base and acute labour shortages. By adopting CA methods, smallholders can increase farm outputs without the need for large-scale investments, and it is a way to combine agricultural production with environmental concern.

sustainable and productive farming practices in Malawi, Kenya, Uganda and Tanzania. CARP is in line with the Comprehensive Africa Agriculture Development Programme (CAADP) under The New Partnership For Africa's Development (NEPAD), an agency under the African Union (AU).

The overall CA minimum tillage adoption under CARP has been less successful than for CAP II, with an estimated 55% of targeted adopters being

Tillage Service Providers (TLS)

In line with the CFU objectives and goals, emphasis is placed on safe and effective use of professional private tillage service provision, in order to increase yields, reduce cost and labour inputs and increase the area under cultivation and opportunities for diversification.

Entrepreneurs among the CFU beneficiaries are therefore given the opportunity to establish their own businesses by buying tractors and equipment that other farmers rent for crop processing and transport. During 2015, 60 CFU small-scale farmers will purchase such equipment on commercial terms in Zambia and become Tillage Service Providers (TLS).

This facilitation by the CFU has been crucial for developing a new technological standard in Southern and Eastern Africa for climate resilient agricultural practices. The farmer-driven extension system based on training of trainers has gradually been expanded in cooperation with the private sector, which provides training and counselling. Research done by CIMMYT has shown that every 1 dollar invested in such cost-efficient training programmes will in the best cases provide up to 18 dollars in increased income to the farmer - a considerable profit of Norwegian investments in poor farmers that directly benefits the household. With a further upscaling of the programme, the private sector will take a bigger part of the costs of farmers training and counselling.

reached. One reason for this is constraints in accessing ripping equipment and services.

In total 50 200 small-scale farmers had adopted climate-smart agriculture under CARP by the end of 2013. There is also an increased awareness of conservation agriculture in the region, and many institutions and organizations have developed programmes focusing on climate-smart agriculture.

CLIMATE SMART AGRICULTURE IN MOZAMBIQUE – PROMAC



Norway is currently supporting the NCBA Cooperative League of the USA (CLUSA) in implementing the Conservation Agriculture Promotion (PROMAC) for Smallholders and Emerging Farmers through the Norwegian embassy in Mozambique. PROMAC promotes the adoption of CA in Mozambique, in order to contribute to a long-term sustainable increase of food security and farmer incomes. Norway signed a five-year contract of NOK 85 million with PROMAC in 2012.

The PROMAC methodology is based on a 'learning-by-doing' approach, in which lead farmers are selected, and plots set aside for demonstration of CA practices which they show to a group of neighbouring farmers. With Norwegian support, the ongoing project seeks to train a total of 36 000 farmers in CA techniques in three regions in Mozambique by 2017. Since the project was initiated, a total of 10 962 farmers have participated in CA and agro-forestry courses, while 4319 have participated in agribusiness, marketing and post-harvest courses.

By June 2014, the project showed increased agricultural yields through CA practices. Particularly maize and soybean gave much higher yields compared to traditionally cultivated plots of equal size. The project has further succeeded in the adoption of soil cover practices, and farmers have stated that erosion has been reduced since they adopted CA techniques.

NEW AGREEMENTS FOR CLIMATE SMART AGRICULTURE IN MALAWI

In 2014, three new agreements were signed between the Royal Norwegian Embassy in Lilongwe with the NGOs We Effect, Total Land Care and the Norwegian Development Fund. By 2019, a total of NOK 222.9 million will be assigned to these organisations.

The goal of the Norwegian support is that 1.3 million Malawian farmers will adopt sustainable agricultural methods and improved technology by 2019. These three organisations are working in different districts with a number of local institutions. The main emphasis is on implementation of CSA and efforts to adopt new crops such as coffee, paprika, legumes and sunflowers, as well as a pilot project for the nutritious quinoa grain. More than half of the beneficiaries in these programmes will be women.

We effect is working with The Malawi Lake Basin Programme (MLBP). By 2014, MLBP had reached out to 10 673 farmers against the target of 16 000 for the ongoing phase. At the same time, the programme is also maintaining the 89 940 farmers who were mobilized in former phases of MLBP. The promotion of drought tolerant crops among smallholder farmers has helped to reduce the negative impacts of climate change and has improved food security and the nutrition situation. The programmes have also included literacy capacity building among farmers.



Total Land Care is working with the five-year programme Management for Adaptation to Climate Change II (MACC II). MACC II seeks to improve the livelihoods of 115 000 rural households or 575 000 people, 65% of whom are women, in the Central Watersheds of Lake Malawi by 2019. Overall, good progress has been registered during 2014 with most activities focused on laying a foundation for the implementation of various project interventions. Two core activities to achieve the results have been community sensitization meetings and training of both staff and farmers.

The Norwegian Development Fund (DF) is working with the programme The Sustainable Land Agriculture Lead Farmers Programme (SALFp). It has since its implementation used a lead farmer model as a successful and cost-efficient method to increase food security for smallholders in Malawi. Given its past successes, SALFp started to scale up its actions in 2014, intending to reach an additional 100 000 rural households. The programme considered HIV/AIDS as a crosscutting issue and 7000 households affected by HIV/AIDS will be targeted.

UNIVERSITY COLLABORATION IN TANZANIA



Norway has supported Sokoine University of Agriculture (SUA) in Tanzania for more than 40 years. The ongoing programme Enhancing Pro-poor Innovations in Natural Resources and Agricultural Value-chains (EPINAV) was funded for a five-year period in 2010 with NOK 73 million. The purpose of the programme is to undertake research, strategic interventions and capacity building in order to enable target beneficiaries to enhance livelihood security and adapt to climate change.

Under EPINAV, SUA, in collaboration with the Norwegian University of Life Sciences (NMBU), has undertaken on-farm research with a valuechain approach in different agro-ecological zones. The highland zone of Njombe community in East Tanzania is experiencing a rapid expansion of human population, land scarcity for agriculture and susceptibility to soil erosion. Shortage of rainfall due to climate change and variability increases the risks of crop failure and reduced yield and fodder production. The research in Njombe focuses on increased agricultural production, climate change mitigation measures and on possibilities for up-scaling dairy production. Establishment of farmer-to-farmer training has spread the new technologies in Njombe as well as in other parts of Tanzania.

Achievements so far show improved soil fertility and nutrient balance by appropriate fertilizer and herbicide use (best practices), which has increased maize yield from 1.3 tons/ha (national average) to 5.4 tons in the area. Excess milk production has increased the income of 800 farmers by 140% in three years. Development of biogas systems based on manure for household energy has led to less need for wood and thereby reduced deforestation in the area, eased women's workload and improved the quality of manure used as fertilizer.

These achievements are based on research done in collaboration with researchers at SUA and NMBU. Through engagement by SUA staff and students, local knowledge is developed and spread in the community. The research has also lead to capacity building at SUA, which will enable the university to contribute to development in several areas in Tanzania in the future.

NORWEGIAN PEOPLE'S AID (NPA) MOZAMBIQUE

Since 2013, Norway has supported Norwegian People's Aid (NPA) in implementing organizational support and development of UNAC's and ORAM's membership association in Mozambique. The programme objective is to strengthen the voice and influence of grass roots organizations in order to make small-scale farmers able to claim and defend their rights, and improve their living conditions.

Since January 2013, the NPA programme has provided access to markets for 20 000 vulnerable households, and around 120 new beneficiaries are currently using CA practices and have increased their agricultural yields in 4 districts of Manica and 3 districts of Tete Provinces. In line with a lead farmer programme, around 200 direct beneficiaries are now replicating their knowledge in their associations, communities and households. The objectives of the NPA organisational support programme are to promote food sovereignty for the smallholder population in Mozambique.

Food Sovereignty Movement

The International Food Sovereignty Movement in Mozambique defines Food Sovereignty as people's rights to healthy and culturally appropriate food produced through environmentally sound and sustainable methods and the right to define their own food and agricultural systems. Food sovereignty as a concept incorporates a variety of challenges related to food security, including political aspects, and it addresses the issue of power directly. It includes aspects of securing livelihoods, gender equality, environmental objectives, land and property rights, local autonomy and democracy.

The movement is organized in UNAC and ORAM in order to advocate for their rights and make their voices heard in rural development policy and legislation at a national level. Their main vision is to increase food security by pressuring for a Mozambican economy that values and includes family-driven CA. Farmers also emphasize that they need technical knowledge and skills to produce a variety of food while conserving the land, as well as earning fair prices for their products in order to pay education, health, clothes and shelter for their children, and to ensure land tenure for their heirs. The movement receives support from NPA.

FAO SUPPORT TO SMALL-SCALE FISHERIES

FAO member countries approved in 2014 new Voluntary Guidelines for Securing Sustainable Small-Scale Fisheries in the Context of Food Security and Poverty Eradication. The process of negotiating these guidelines has taken several years. Norway has actively and financially supported the process, which included regional workshops among civil societies and states, and eventually a technical consultation in FAO in which all states, civil societies and other stakeholders met to negotiate the final text of these guidelines. FAO Fisheries Committee approved the guidelines at its meeting in 2014.

EXAMPLE

CGIAR RESEARCH

For more than 40 years, CGIAR and its partners have transformed the lives of hundreds of millions of people with the positive outcomes of agriculture research, including improved crop varieties, sustainable farming methods, new fish strains, novel livestock vaccines, climate-smart solutions and detailed policy analysis.

Examples include:

1. Drought tolerant maize has increased farmers' yields by 20-30%, benefiting 20 million people in 13 African countries.

2. "Scuba rice" which can survive under water for two weeks, is protecting the harvests, incomes and food security of poor farmers and consumers across monsoon Asia.

3. Newly developed potato varieties that withstand late blight disease and have yielded eight times more than native varieties in the region have made the difference between having enough to eat or not in the Paucartambo province of Peru, where late blight threatened to devastate staple food supplies. 4. By integrating food crops with trees that draw nitrogen from the air and transfer it to the soil, an innovative agroforestry practice captures carbon and reduces greenhouse gas emissions, while improving soil fertility, rainwater use efficiency, and yields by up to 400% for maize in the Sahel region.

5. Across Afghanistan, Bangladesh, Ethiopia, Egypt, Nepal, and Pakistan, high-yielding wheat varieties resistant to Ug99, a highly virulent disease, have protected the livelihoods and food security of 500 000 farming families.

6. In eastern Africa, a vaccine against East Coast fever, a deadly disease of cattle, has saved 620 000 calves, benefiting up to 50 000 poor households that rely on cattle for food and income. The vaccine could benefit 20 million more people in the region, with annual benefits of \$270 million.

CGIAR has a strong track record in delivering solutions, building resilience, and helping people all over the world to grow more nutritious food.

AFLASAFE

Ground-breaking collaborative research is ensuring safe food and the health of Africans. The IITA (CGIAR) and partners have developed a series of biocontrol products generically named as Aflasafe that reduce aflatoxin contamination by >70% in maize and groundnuts, increase crop value by at least 25%, and improve the health of children and women.

Aflatoxins are invisible and tasteless poisons produced by Aspergillus flavus, a mould commonly found infecting crops such as maize and groundnuts, both in the field and in storage. While acute exposure to aflatoxins can kill, prolonged exposure causes liver cancer, suppresses the immune system, retards growth and development, and leads to chronic liver disease, cirrhosis and death in both humans and livestock. It also affects other high-value edible nuts. Aflatoxins impact international trade, with African economies losing US\$450 million every year from barred exports.

Aflatoxin is an important constraint to improving the health and well-being of African people. Rural poor in Africa are chronically exposed to unsafe levels of aflatoxins. Food consumed is usually produced, stored, prepared and marketed by farm families without much awareness of the risks of aflatoxin. Because of the serious food safety risks, human exposure to aflatoxins is limited by regulations that prohibit the use of crops containing excess quantities of aflatoxins for foods and feeds in the developed world. However, the regulations are not usually effectively enforced in Africa.

To link small farmers to markets, and to improve food production and quality, it is clear that unless aflatoxin levels in crops and livestock are effectively managed, agricultural development efforts to achieve greater food security and improve health will be undermined, particularly in sub-Saharan Africa where contamination is widespread and often acute. Reduction in aflatoxin content in



crops can improve access to markets, thus enhancing income and reducing human exposure to the natural poison for improved health.

Aflasafe[™] works by 'pushing out' harmful, toxinproducing strains of A. flavus from the field through the deliberate introduction of indigenous but non-toxic, harmless strains – a process known as 'competitive exclusion'. Heat-killed sorghum grains are coated with the non-toxic fungal strains and scattered by hand in the field prior to crop flowering. Field tests at IITA in Nigeria between 2009 and 2012 showed that use of Aflasafe[™] consistently reduced aflatoxin contamination in maize and groundnut crops by 80-90%.

The IITA has established a pilot plant that can produce 5 tons of Aflasafe in an hour. Thousands of Nigerian smallholder farmers use Aflasafe and benefit from increased income and improved health.

The efficacy of the biocontrol approach has led to its expansion in other African countries. Burkina Faso, Kenya, Senegal, The Gambia and Zambia have products ready to go through the registration process while products are under development in Burundi, Ghana, Kenya, Malawi, Mozambique, Rwanda and Uganda.

CAPACITY BUILDING IN HIGHER EDUCATION AND RESEARCH

The aim of the Norwegian programme for capacity building in higher education and research (NORHED) is to strengthen the ability of national higher education and research institutions to educate the workforce and to develop knowledge relevant to development in the countries. Several projects under NORHED focus on food production in a climate perspective, and have the potential to enhance livelihoods of small-scale farmers and artisanal fishers. The projects started in 2014 with a five-year time-span. All projects are based on collaboration between institutions in developing countries and in Norway.

Examples are:

1. Controlling diseases in sweet potato and enset in Ethiopia and South Sudan will increase knowledge about plant protection to improve productivity and resilience of small farmers to climatic changes in Ethiopia and South Sudan.

2. Research and capacity building in climate smart agriculture in the Horn of Africa aims to strengthen competence on climate smart agriculture to increase food production and farmer income, make agriculture less vulnerable to climate change and contribute to reducing greenhouse gas emissions from agriculture.

3. Capacity Building for Training and Research in Aquatic and Environmental Health in Eastern and Southern Africa (TRAHESA) aims to build competence on fish and environmental health to monitor and protect wild freshwater and marine fish populations, which are essential for food security and food safety for people in the southern African region.



4. Capacity Building for Climate Smart Natural Resource Management and Policy (CLISNARP) will improve capacity for evidence-based policies on climate smart natural resource management in Ethiopia and Malawi and thereby contribute to improved food security, nutrition, household incomes and livelihoods in the regions.

5. Steps towards sustainable forest management with the local communities in Tigray, Northern Ethiopia will contribute to climate change adaptation and food security through improving the use of forests as a means of income diversification for local communities in Ethiopia. The final beneficiaries of the project will be the local communities surrounding the forests in the Tigray area of Ethiopia.

PRIVATE SECTOR DEVELOPMENT

According to the strategy, Norway will

Promote public-private partnership and incentives for private investment, for example by supporting value chain programmes. This will involve continuation of the strategic cooperation with Norwegian and African private sectors.

Intensify efforts to ensure that developing countries produce food that meets international standards and requirements to be sold in national and world markets.

Food production and trade is a business that involves a range of actors, goods and services tied together along a value chain in order for products to move from soil and sea to final consumer. The chain involves stakeholders like small-scale food producers, commercial actors, input suppliers, merchants, and business corporations. In most developing countries, actors within the food sector are facing limitations in establishing a value chain and thereby constrain food producers from accessing regional and international markets. These challenges commonly arise from inabilities to handle demands on qualities and standards resulting from a lack of knowledge and technology, poor logistics and transportation systems, and limited price information and negotiation power. Small-scale producers, who make up the biggest sector in terms of employment, are therefore struggling to compete regionally and internationally, in spite of increased demand for their products.

Private sector development (PSD) refers to a range of strategies for promoting economic growth and reducing poverty by establishing private enterprises in developing countries. In-country food production and trade represent opportunities for income generation for small-scale farmers and the establishment and growth of the national private sector. However, due to poor market integration and low value creation, countries in Africa annually import food for millions of dollars. Regional trade organisations such as The common market for Eastern and Southern Africa (COMESA) are relevant partners for scaling up food trade in Africa. However, major investments and incentives are needed at local and national levels.

In order to successfully develop the agriculture and fishery sectors, there is a considerable need for attracting public and private investments, both in small-scale and large-scale operations. However, many African countries lack preparation for large-scale investments due to poor distributional politics, bad governance, and weak regulations for commercial land investments. According to the African Development Bank's strategy for PSD from 2013, private sector growth in Africa, where it has occurred, has often been uneven, has involved severe exploitation of natural resources, and has failed to create sufficient employment opportunities and value creation for local populations.

The Norwegian strategy

An important emphasis of the Norwegian strategy is to encourage investments that are economically, environmentally and socially sustainable and inclusive. Norwegian support to private sector development therefore promotes PPPs and incentives for private investments by supporting value chain development programmes. The approach is to maximize the value of any given product in a way that gives most benefits to the poor. This might contribute to increasing small-scale farmers' productivity, and realizing the value of their products in the formal economy. PSD further encourages increased value and work creation, thereby ensuring increased income for small-scale farmers and other actors in related enterprises. Norwegian support to such initiatives are provided as investments with support from Norfund or as development support mainly through the Norwegian embassies.





NORFUND

The Norwegian Investment Fund for Developing Countries (Norfund) – is a state-owned investment fund acting as an instrument of Norwegian development policy. Agribusiness has been a strategic investment sector for Norfund since 2011. Approximately 7 per cent of Norfund's portfolio is invested in agribusiness, including forestry and aquaculture.

It is Norfund policy that all projects must be aligned with the priorities of the host country, that land and labour issues must be dealt with in a responsible manner, and that all projects follow the strict environmental and social performance standards of the International Finance Corporation (IFC).

Norfund invests in primary agriculture, the processing and sale of agricultural products to increase productivity and local value creation. Norfund reaches smallholder farmers through investments in banks and microfinance institutions, and by financing companies that work closely with smallholder farmers through out-grower schemes and other means. Such links can provide smallholder farmers with access to capital, markets, infrastructure like storage and expertise. These are the main constraints facing smallholder farmers in moving from subsistence farming to becoming smallholder commercial farmers. Correctly done, this is a win-win situation for local communities and the company.

The majority of Norfund's target companies in the agribusiness sector are medium-sized enterprises. At the end of 2014, the agribusiness portfolio consisted of 11 direct investments in Ethiopia, Kenya, Mozambique, Nicaragua, Swaziland, Tanzania, Uganda, Zambia and Zimbabwe. Norfund has also invested in Agri-Vie, an agricultural fund, and provided a loan to LAAD, a financial institution that provides loans and advisory services to medium-sized agricultural enterprises. Voxtra, a Norwegian fund targeting smallholder-oriented agri-investments in East Africa has also been financed by Norfund



FIGURE 6: NORWEGIAN DEVELOPMENT SUPPORT TO AGRICULTURE AND FISHERY SECTORS THROUGH NORFUND FROM 2005 TILL 2014

Figures 6 and 7 show levels of NORFUND investments. Agribusiness has been a key investment sector for Norfund since 2011. At the end of 2014, Norfund's portfolio included 11 companies in agriculture, forestry and fishing, two agricultural funds and one financial institution that provides loans and advisory services to medium-sized agricultural enterprises. At the end of 2014, Norfund had committed a total of NOK 950 million to these investees. There is often a difference between the amount committed and the actual disbursement, as the committed amount can be disbursed in several tranches over time. The above graphs present actual disbursements to investments within agriculture and fishing.

FIGURE 7: NORWEGIAN DEVELOPMENT SUPPORT TO AGRICULTURE AND FISHERIES THROUGH NORFUND FROM 2010 TILL 2014 IN THREE SELECTED COUNTRIES



Investments trough NORFUND in Zambia, Mozambique and Tanzania varied through the period. There were no investments through NORFUND in Ethiopia, Malawi or Mali in the same period.

AFRICAN CENTURY FOODS (ACF)



In 2013, Norfund invested in African Century Foods (ACF), a fully integrated producer and distributor of farmed fish and chicken, in order to strengthen and expand ACF's operations in Zimbabwe, Zambia, Uganda and Mozambique. The company's supply of affordable, high quality, fresh protein is important in countries facing challenges related to the availability and affordability of nutritious food supplies.

Operating through its subsidiary companies, ACF farms and produces 10 000 tonnes of tilapia annually, and has full control over the key production processes involved. The demand for quality fish products is increasing, and aquaculture provides a sustainable response to the increasing challenge of overfishing in the lakes of Zambia, Uganda and Zimbabwe. In Mozambique, ACF's subsidiary company Frango King produces fresh and frozen broilers, and day-old chicks which are sold to local small-scale farmers in the Nampula region of Mozambique together with a feed pack. The availability of quality day-old chicks is helping to strengthen the local supply of food and providing extra income for small-scale local farmers. The company is specifically targeting the lower end of the market, and provides quality jobs to over 1400 people through its regional operations. Its contribution to local economic activity is also significant, as it engages with a large number of companies and smallholders in the value chain. In Uganda for instance, feeds are sourced from local suppliers that have participated in training in quality, packaging and weighing of feeds. In Zimbabwe, ACF sells fry to smallholder farmers, and provides technical assistance on growing fish for sale and own consumption.

The majority of ACF's products are sold through its regional network of wholesale and retail distribution outlets, thereby creating hundreds of entrepreneurial trading jobs. Most are undertaken by women who typically purchase fish supplied through ACF's local distribution centres in Zambia, Zimbabwe and Malawi for on-selling at local markets.

Norfund works closely with the company to ensure adherence to strict environmental and social performance standards like those of the International Finance Corporation (IFC) GlobalGAP.

SAGCOT CENTRE LTD.

Norway, through the Royal Norwegian Embassy in Dar Es Salaam, Norad and Yara, has been a key player and a driving force behind the establishment of the Southern Agricultural Growth Corridor of Tanzania (SAGCOT). SAGCOT is an inclusive, multi-stakeholder public-private partnership consisting of farmers, agri-business, the Government of the United Republic of Tanzania and companies from across the private sector. The stakeholders in the corridor channel and concentrate investments in order to promote inclusive and commercially successful agribusinesses that will benefit the region's small-scale farmers, and by doing so improve food security, reduce rural poverty and ensure environmental sustainability. SAGCOT envisions that USD 2 billion of private investments can be mobilized over a twenty-year period, alongside public sector grants and loans of USD 1.3 billion. This would lead to a tripling of the area's agriculture output and income improvements for millions of Tanzanians.

The Royal Norwegian Embassy in Dar Es Salaam signed an agreement of NOK 9 mill. over three years with the SAGCOT Centre Ltd in 2014. The SAGCOT Centre Ltd. functions as an honest non-partisan broker to support the SAGCOT partners to achieve the objectives by facilitating partners to establish inclusive, sustainable and commercial agricultural value chains. In 2014, the partnership expanded from 44 to 71 registered partners, and private sector pledges increased from USD 750 million to USD 1 billion.



Public Private Partnerships

Support to the private sector and public-private partnerships is an important part of the Norwegian strategy. Norway is actively promoting public-private partnerships (PPPs) in order to develop predictable national frameworks and encourage responsible private investments for private sector development. PPPs are used as a means for private investments to become more attractive, and commonly involve capital investments made by the private sector on the basis of a contract with government to provide agreed services.

TANZANIA AGRICULTURAL PARTNERSHIP (TAP)

Norway has been a important donor to the Tanzanian Agricultural Partnership (TAP). By using a valuechain approach (VCA), TAP seeks to improve access by Tanzanian smallholder farmers to affordable credit, appropriate input and profitable output market value chains with an overall goal to increase household incomes and food security. TAP includes crosscutting issues such as gender, youth, HIV-AIDS, environment and climate change within all project activities. TAP phase I was finalized in 2014. Based on its achievements and lessons learned, Norway has continued to support the Phase II programme (2015-2019).

Since it was first implemented in 2008, TAP has contributed to value chain development for maize and rice in 13 districts, which has resulted in the fostering of business linkages and adoption of VCA by district authorities. Information based on value chain surveys has been used to set up the Tanzanian Rice Partnership (TARIPA), and to start up appropriate interventions within the Southern Highland Food Systems Project (SHFSP) and the Southern Agricultural Growth Corridor of Tanzania (SAGCOT).

In order to increase access to and use of improved inputs, TAP has facilitated cooperation between agro-input companies such as Yara and other agro-input suppliers and dealers throughout its working areas. A total of 2843 agro-dealers have received training in technical and business management skills. These agreements provide agro-input dealers with an opportunity to purchase fertilizers under credit, and pay after the consignment is sold, which further enables them to expand business despite low investment capital. These factors have led to increased volumes of inputs supplied to rural markets by 15%. Moreover, more than 3000 smallholder farmers have benefited from the rehabilitation of 35 Warehouse Receipt Systems (WRS).

Warehouse Receipt Systems (WRS)

Warehouse receipt systems (WRS) is a storage structure often organized around a group of farmers, which enables farmers to store their crops in certified district warehouses, and get a warehouse receipt. The storage system reduces crop waste, and the farmers can use the receipt they get from storing surplus crops as collateral in order to get a loan. The warehouse operator thereby links the farmers with potential buyers such as local processors, relief agents and exporters. Meanwhile, the storage facilities also offer farmers a possibility to sell their commodities when prices are high, and thereby earn a fair price for their products.

TAP is continuing to assist smallholder farmers through their associations to develop vibrant Warehouse Receipt Systems (WRS) that will enable them to access reliable and lucrative markets through aggregation of produce and market services, enhanced bargaining power and improved access to short term financial services. TAP is therefore working closely with the public sector, government agencies, private sector and large-scale traders as well as development partners and farmer organizations. By the end of 2014, TAP had contributed to the rehabilitation of 35 WRS within its operating areas, and an estimated 3000 smallholder farmers have benefited from the rehabilitation.



System Rice Intensification (SRI), Tanzania

System Rice Intensification (SRI) is a new agricultural rice cultivation method aimed at increasing yields, saving water and reducing production cost. The SRI method is labour-intensive and seedlings are planted singly, and weeds are commonly hand-weeded with special tools. SRI is considered a climate smart agricultural method.

Within the rice production sector in the Kiroka irrigation scheme, the Tanzanian Agriculture Partnership (TAP) phase I, alongside partner research institutions, has been working to enable smallholder farmers to increase rice production and productivity. The activities included training of farmers in SRI practices, developing rural based agro-dealerships to ensure access to inputs, and training smallholder agro-dealers in business skills. These interventions enabled farmers to establish an irrigation association with 550 active members, of which 220 were female. In 2010/2011, farmers that were involved in the scheme registered a yield increase of 500%, which is the single most significant achievement ever recorded in the district.

Based on this success, the Kiroka irrigation scheme was included in the government's Big Results-Now initiative. By the end of 2014, Kiroka farmers still continued to receive training in SRI. Farmers in the area state that they can now produce more while utilizing less water, which is increasingly becoming a scarce resource. SRI has provided farmers with a method that enables them to build adaptive and mitigative capacities to deal with the stresses caused by climate change.

MALAWI AGRICULTURAL PARTNERSHIP (MAP) II

In Malawi, the African Institute for Corporate Citizenship (AICC) has implemented the Malawi Agriculture Partnership (MAP) since 2009. In 2014 a MAP II programme was initiated due to the achievements in phase I. MAP II is a platform approach that brings the private sector, the Government and other stakeholders together in cooperation for responsible and inclusive private sector development in the cotton and rice sectors. The goal is to contribute to the reduction of poverty of smallholder farmers in Malawi through a public private partnership (PPP) approach, and stimulate creation of more productive and market focused value chains.

An important part of the AICC strategy is to generate economic growth and sustainable poverty reduction through the promotion of Corporate Social Responsibility (CSR) principles. CSR refers to business responsibilities towards the community and environment in which it operates, thereby enhancing the importance of good corporate citizenship principles like transparency, accountability, and good governance in private sector investments.

MAP II will be implemented over a five-year period (2014-2018), and it is expected that a total of 105 000 smallholder households will directly benefit from MAP Phase II by increased incomes and enhanced food security. Other important beneficiaries will be the value chain stakeholders from the private sector, public policy makers, and extension agents. The programme further involves several crosscutting issues such as credit facilities, e-voucher systems, conservation agriculture (CA) and transport corridors. In 2014, MAP II received NOK 8 million in Norwegian support.

Electronic Vouchers and enhanced transparency

The Malawi Government through the Ministry of Agriculture and Food Security has implemented the Farm Input Subsidy Programme (FISP) since the 2005/06 growing season. FISP seeks to increase smallholder farmers' access to improved agricultural farm inputs. One of the most challenging factors for achieving the goal is attributed to the use of paper vouchers. Paper vouchers are problematic because they have to be manually handled, are easily replicated and typically contribute to delayed payments. This may reduce work capital, stock availability and hinder value chain development, and make room for errors, fraud and corruption.

With funding from Norad and the Royal Norwegian Embassy in Malawi, AICC and the Government of Malawi, a pilot electronic voucher (eVoucher) system was implemented for the 2013/2014 and 2014/2015 growing season. The project responds to issues with direct impact on the production and marketing environment through access to inputs and private sector participation, while bringing in elements of transparency and accountability to the agricultural sector and the partners of MAP II.

Under the eVoucher system, stakeholders use scratch cards (eVouchers) with a unique serial number that is linked to the individual input supplier or agro-dealer. The system allows for instant acquisition of products and items as well as instant payment for the products via mobile payments. The use of vouchers is expected to promote farmer-driven and market-friendly recovery and development, as well as supporting the reestablishment of agro-dealer networks across the country. Researchers argue that governments can save between 50 and 70 % of administration costs by replacing paper vouchers with eVouchers. So far, eVouchers have been implemented in 18 out of 28 districts, and by the end of 2014, a total of 210 481 farmers had benefited from the eVoucher system in Malawi.

NASFAM STRATEGIC DEVELOPMENT PROGRAMME III (SDP III)

Norway has for many years supported the National Smallholder Farmers' Association of Malawi (NASFAM). The objective of the NASFAM-Norway partnership is built on a commitment to poverty reduction through improving livelihoods of Malawian smallholders. One important target of the NAS-FAM-Norway partnership is to make private sector business linkages and move farmers up the value chain. In 2012, Norway committed to support the NASFAM SDP III with NOK 100 million during the implementation period (2012-2017). The overall programme objective is to improve living conditions of smallholders through a sustainable network of smallholder-owned rural innovations and productivity centres.

NASFAM is made up of commercial agribusiness associations that are independent, self-governing and financially viable. NASFAM is continually growing in terms of membership, geographical areas and crops. The NASFAM associations are made up of clubs of between 10 and 20 farmers, who work together in a Group Action/Marketing Centre Committee. These clubs then in turn form associations of 300-5000 members. The Association Committee is elected by the General Body, which also elects National Assembly representatives. Association sub-committees are formed to coordinate specific activities in the association. Today, NASFAM has about 100 000 members structured in local councils, and the organization is considered one of the most successful in the region.



According to NASFAM development impact assessment, the organisation has contributed to higher productivity in agriculture in Malawi. 50 per cent of NASFAM smallholder farmers produce enough food to feed their families as compared to 32 per cent in general. Norway's contributions have assisted NASFAM's work to diversify farmers' crops, from tobacco and maize to cotton, rice, peanuts, soy, chilli and paprika.

Through buying products directly from its members, NASFAM has enabled members to sell their products at competitive prices, which contributes to increased household incomes. In 2014, farmer members generally increased their volumes of rice, groundnuts and maize sold to NASFAM. NASFAM is also continuously working to expand its brand, and in 2014, NASFAM scooped the best Agro Processor award at the National Agricultural Fair in Malawi. Notably, the NASFAM 'Kilombero' rice is now established as the number one choice for most consumers in the country. Branded beans, chillies and roasted nuts have also become more popular. NASFAM farmers' peanuts have been approved as Fair Trade products.

COMACO

The Community Markets for Conservation (COMACO) is a "not for profit" private enterprise that has established itself as one of the leading food brands in Zambia under the name *It* 's wild! Since its implementation, COMACO has shown that efforts to develop the private sector, while promoting food security and conservation of natural resources, could be successfully combined. Based on its achievements, COMACO received NOK 14.4 million in support through the Royal Norwegian Embassy in Lusaka for the COMACO (phase III) expansion project "Scaling up Across the Luangwa Valley" in 2014.

The COMACO vision is to make the Luangwa Valley ecosystem secure from human disturbances by sustaining incomes and household food needs through trade incentives driving sustainable land use practices. Through provision of marketing services, trade benefits and extension support, COMACO enables farmers to improve land use and farming practices, promoting natural resource conservation, while improving household incomes and food security.

A specific milestone for the Phase III project is to increase annual incomes by \$350 for over 65 000 small-scale households in Luangwa valley by 2019. *It's wild* purchases raw products from a cooperative of 101 000 small-scale farmers who have agreed to reduce environmental threats by adopting improved farming techniques and environmentally sound land use practices. As a business model, this contributed to market-based solutions for low-income farmers who earn a significantly higher market value for their produce (up to 20% above



standard market rates) when they demonstrate compliance with conservation guidelines. Between April and September 2014, a total of 4336 farmers benefited from the markets provided by COMACO. The total number of beneficiaries is expected to double after finalizing the crop purchase exercise.

In 2014, year on year sales increased by 47 per cent, except for rice sales, which decreased by 17 per cent. COMACO is currently promoting System of Rice Intensification (SRI) methods to increase rice yields in order to enable farmers to sell their rice at more competitive prices without impacting significantly on the profitability of growing the crop. However, the influx of cheap rice from Asia leaves COMACO with few options other than lowering the price for farmers, which is 20-25 per cent above commodity market price, and to ask for governmental intervention to reduce imports that are depressing the local markets.

AQUACULTURE DEVELOPMENT

Several developing countries have requested Norway for support to establish a modern aquaculture industry with large cages in the sea. Norway has assisted both Thailand (post-tsunami) and Cuba in this. The projects have taken the form of cooperation with the fisheries authorities in the countries to increase their knowledge about requirements and procedures for large cage fish farming. This entails testing which species are suitable for these kind of cages, feed requirements, fish health, hatcheries, nurseries, etc. The centres are used for demonstration of techniques to prospective investors and for further research and testing. These projects are thus not directly aimed at supporting the private sector.

Through the fisheries authorities and an applied research institutes, Norway supports Vietnam with capacity building in marine aquaculture, including a demonstration plant for marine aquaculture in Khan Hoa, short courses for workers and fish farmers at a local vocational school, as well as research on selected topics of relevance for marine aquaculture. A recent external mid-term review commends the project for developing the demonstration plant as regards the production of local species and the working environment, for having good demonstration effect, and that the plant has a high survival rate for fish. The project has also developed the marketing, both domestically and abroad, for farmed marine fish. There is, however, still a need to enhance competence in fish health, nutrition and feed development, and to assist in a policy framework for the development of marine fish farming.

Norway has since 2012 been engaged in institutional cooperation for establishing a legal framework for aquaculture in Malaysia. Having a regulatory framework in place is likely to increase the interest of serious investors in the industry, and thereby assist in the creation of employment and development of this industry in Malaysia. The project emphasizes principles of good governance, environmental issues and fish health, and seeks to establish a basis for future aquaculture regulatory frameworks at state level in Malaysia. The goal of the cooperation project has not been to copy the Norwegian regulatory system, but to learn from Norwegian experiences and knowledge. The Directorate of Fisheries in Norway is responsible for the technical assistance given. Last year the project finalized a draft regulatory framework for aquaculture in inland waters, and the process of getting the framework approved by the Senate has now started. The project will run until the end of 2016.

Norad manages funds for private sector support, i.e. it is possible for companies that wish to establish themselves in developing countries to request support for feasibility studies, training of local staff, environmental installations, piloting, etc.

MARINE BUSINESS DEVELOPMENT, MADAGASCAR

In 2014, Norway granted NOK 2 mill. to support the "Marine Business Development Programme" in Madagascar through The Royal Norwegian Society for Development (Norges Vel). The Society is cooperating with several institutions and organisations in Madagascar, both state-owned, research institutions, NGOs and private businesses. The project, which was initiated in 2012, aims at improving the living conditions for the coastal community of Madagascar, through private sector development based on breeding of algae, sea cucumber and tilapia. The project is in line with the overall Malagasy strategy for aquaculture, in which aquaculture is considered as one of the country's most important sources of export income, local employment, income and private sector development.

The project approaches the entire value chain from sea to consumer. There is a high emphasis on strengthening women's participation and empowerment throughout the value chain. To strengthen the position of producers so that they are able to make decisions that impact their own practices and situation, a locally based "self-help" cooperative has been established. Through this cooperative, members are obliged to sell their fish, as well as purchase brood from the hatchery owned by the cooperative. Through the cooperative, members also receive technical training and logistics and transportation facilities. Since its initiation, recent reports show that the project is underway to develop an integrated economically viable tilapia operation under the framework of a Union Cooperative. In October 2014, the harvest had grown to provide profit above the minimum monthly salary in Madagascar, while significantly contributing to the operational costs of the cooperative. While revenue sales are increasing, the economic outputs have not yet reached their full potential. Becoming a good technician and a good farmer must be considered as a long-term process.
GENDER EQUALITY

According to the Norwegian strategy

Women play a crucial role for food and nutrition security, and they can strengthen their influence if they achieve equal rights as men

Equal rights for women as for men in agriculture may increase yields from women driven farms by up to 30 per cent (FAO)

Gender issues must be crosscutting in agricultural policy.

If women in rural areas had the same access to land, technology, financial services, education and markets as men, agricultural production could be increased and the number of hungry people reduced by 100-150 million, FAO said in its 2010-11 edition of The State of Food and Agriculture report. Just giving women the same access as men to agricultural resources could increase production on women's farms in developing countries up to 30 per cent.

Women play a key role in agricultural production and household food security. In Africa, women make up the majority of small-scale farmers, and account for 60-80 per cent of local food production. Women are also the main caretakers of the family, as well as conducting other chores such as collecting firewood and water. The burden of these responsibilities severely limits women's food production and the time for engaging in income-generating activities. Women do not enjoy the same rights and opportunities as men. The lack of access to land has the consequence that they tend to be left out of decisionmaking. They are less represented in cooperatives, farmers' organisations and local agricultural boards. Gender issues are commonly not mainstreamed into existing policies, strategies and investment plans in agriculture, environment and climate change related issues.

Due to the inequalities in the agricultural sector, women farmers and pastoralists are especially vulnerable to the impact of climate change. In recognising the importance of women, gender is therefore an incorporated component of all projects covered by the Norwegian strategy for food security in a climate perspective. By doing so, the strategy seeks to redouble efforts to promote empowerment of women and address the various factors that constrain them. To reach these targets, Norway is working is close collaboration with the African Union (AU), which is putting extensive political emphasis on targeting women in the agricultural sector.





Gender is a crosscutting issue in Norwegian development support. However, only a small part of the NOK 1 billion in bilateral support to food security has women and gender as the main issue. Almost half has the perspective as a significant focus.

NEPAD – GCCASP

A pillar in the Norwegian climate partnership is the support to New Partnership for Africa's Development (NEPAD) under the African Union (AU). NEPAD has designed a five-year Gender Climate Change Agricultural Support Programme (GCCASP). The programme supports policy dialogue on gender issues in national agriculture policy within the regional Comprehensive Africa Agricultural Development Programme (CAADP). The programme was launched during the United Nations General Assembly in 2013.

GCCASP's vision is to achieve more equitable participation of women smallholder farmers, youth and other vulnerable groups in planning and decision-making within agriculture and climate change in order to achieve food security. The five pilot countries for GCCASP are Ethiopia, Malawi, Niger, Cameroon, and Rwanda, which represent five of the eight Regional Economic Communities (RECs) recognized by the African Union Commission (AUC).

The programme is country-driven, and the formulation of country project documents has involved consultation with all relevant national and regional stakeholders. The planning process has been highly participatory and 1500-2000 women and men have been involved in order to create ownership of the programme. In 2014, each of the five countries established a secretariate for GCCASP in the Ministry of Gender (MoG). The MoG is responsible for manageing a partnership platform which includes representatives from ministries and agencies working on gender, agriculture and the environment, women's rights groups and farmers' organizations and research institutions.



Different target countries have achieved different 'good practices'. In Ethiopia efforts are put into getting both men and women to sign land lease contracts, in Rwanda there have been good experiences with establishing women cooperatives. In Malawi, many women are now working with Climate Smart Agricultural practices. The RECs are taking a leading role in transferring knowledge between the countries.

During the spring of 2015, NEPAD has supported the participating countries in resource mobilization for their national programmes. In June 2015 NEPAD will gather various donors in order to mobilize resources for the regional programmes.

PAM - E-WAS



Women and climate smart agriculture (CSA)

Conservation agriculture has many benefits for women. It reduces and spreads the women's workloads over time, and reduces women's burden of fetching water. It enables early planting of crops, makes women less dependent on oxen or mechanical tillage equipment, increases crop productivity and production in different crops and increases production of food security crops. Women farmers report that their work in agriculture has become more planned and systematic (including planting, use of fertilizers and crop rotation). In short, women manage to improve their livelihoods by adopting CA practices. The Royal Norwegian Embassy (RNE) in Lusaka, Zambia, supported the Programme Against Malnutrition (PAM) with NOK 3 million in 2014. PAM has continued to implement the Empowering Women in Senanga and Gwembe district through agricultural support (E-WAS) Project. The overall objective is to improve female farmers' livelihoods through increased incomes and resilience to the effects of climate change. It works towards empowering participating women to fight rural poverty, local deforestation and land degradation through agricultural inputs, training and sensitization, adoption of CSA practices and increasing market access. The main activities include support to sustainable farming and promotion of environmental conservation practices. The aim is increased agricultural productivity and diversified income generation opportunities among female farmers.

Energy-efficient cook stoves

Around 40 per cent of the world's population rely on traditional use of biomass for cooking due to lack of access to fuels and stoves that efficiently convert energy and reduce fumes. The burden of gathering fuel for cooking traditionally falls on women, who provide 91 per cent of the total efforts of households in collecting fuel and water. Meanwhile, collection of fuel and charcoal for cooking is having a dramatic influence on local deforestation. This further increases the time spent on fuel collection, as women have to walk further in order to find biomass. Inefficient stoves also contribute to increased carbon emissions, while causing severe health hazards for women who prepare the food. Pneumonia and respiratory illnesses are a main concern for women who rely on inefficient cooking systems.

Within several of the Norwegian-supported food security and agriculture programmes, there is an emphasis on introducing improved and energy-saving cook stoves as a means to reduce deforestation, mitigate climate change and reduce women's work loads and health hazards. Many programmes are introducing training for making simple fuel-efficient stoves that can be made by one adult in one to two hours' time using local materials.

In Malawi, We-effect, Total Land Care (TLC) and the Development Fund are introducing such efforts within the programmes supported by Norway. TLC has estimated that, if properly used, the recommended stove model reduced firewood use by 30-50 per cent, and saves one person-day of labour per week, allowing women to engage in other more productive chores, and increasing school attendance by girls.

Within the Programme Against Malnutrition (PAM) in Zambia, 45 participants have been trained in moulding and demonstration of improved stoves, and a total of 377 energy-efficient clay stoves were in use in 2014 against the target of 420 by the end of 2015. Women beneficiaries from these activities have testified that clay stoves use less firewood, emit less smoke and cook faster than open fires.

In 2014, female farmer participation in project activities increased, and progress was made towards set targets. Good and tangible impacts on livelihood and food security were evident. By June 2014, beneficiaries from 73 women's groups were engaged in both rainy and off-season vegetable garden production. Further, 1705 farmers were trained, bringing the total number of trained farmers to 2657 against the project target of 4200. The training involved participation in conservation farming demonstrations, as well as the planting of fruit trees and the moulding and use of energy efficient clay stoves. Project beneficiaries also took part in capacity building activities to strengthen technical knowledge and skills, including training in processing activities using solar dryers, as well as demonstrations on various issues of hygiene and food safety, preservation, nutrition and utilization.

For some beneficiaries, market participation also increased during 2014. Five women's groups who grew rice were linked to local rice processors in Sananga district. Livestock distribution also improved in both districts. In Gwembe, a total of 450 goats were procured and distributed, while 540 chickens had been vaccinated and distributed in Sananga by the end of June. In 2014 a number of sensitization meetings were also held, covering topics on the impact of climate change, food security and livelihoods and nutrition and HIV/AIDS. Meetings were also held in order to encourage men to actively participate in project activities, and to support women's activities at community and household level, empower women in decisionmaking and fight gender-based violence. A total of 1606 farmers participated in these meetings.

UN WOMEN – MALAWI

One of the main recipients of Norwegian support to food security under UN Women in 2014 was The Gender and Agriculture Programme in Malawi. The goal of this one-year (2013-2014) pilot programme was to empower women farmers as actors in the agricultural sector. The instrument was to use policy dialogue in order to embed gender in agricultural services by creating and enabling a gender-responsive institutional environment. The aim was to increase women's access to and control over markets, cooperatives, means of production and extension services.

UN Women implemented the programme in partnership with the Ministry of Agriculture,

Irrigation and Water Development in Malawi (MoAIWD). The project included a South-South exchange with Rwanda, gender audits of several government institutions, and gender budgeting training of more than 70 officers in MoAIWD. Based on good results, a second phase is planned. While Norway was the sole donor for the first phase, other donors have expressed interest in the second phase. In recognition of the good results, and with full support from the Malawian government, the programme is soon to be integrated in the support to the government's Agricultural Sector Wide Approach. For the second phase (2014-2016), Norway will support the programme with NOK 14.6 million.

EXAMPLE

UN WOMEN – BANGLADESH

In December 2011, an agreement was signed between the Royal Norwegian Embassy in Dhaka and UN Women for project support to Reducing Vulnerability of Women Affected by Climate Change through Livelihood Options amounting to NOK 18 million (2012-2015). The overall project goal is for women in communities vulnerable to the impact of climate change to access sustainable livelihoods and become agents of change in climate change risk mitigation policy. The project will enhance women's knowledge and expertise by providing skills development training in pre- and post-disaster management.

Since the project was implemented, around 1600 poor women from the selected districts have improved earnings after getting skills training in livelihood and expanded their productive assets

and/or increased production of their small businesses. 16 000 women (800 women's groups of 20 each) from poor and often landless communities have been brought together under the umbrella of 'disaster resilient group'. Given the success of the women participating in the project, more women in project communities are eager to get training in livelihood skills and make investments in order to start small businesses.

Through this project support, UN Women has been able to influence national policy to integrate gender issues into the area of disaster management and climate change in national surveys as well as into the National Development Plan of the Government of Bangladesh (2015-2020) for the first time.

SUSTAINABLE LAND MANAGEMENT AND CLIMATE CHANGE, ETHIOPIA

Norway is supporting the Sustainable Land Management Programme in Ethiopia. The programme phase 1 was finalized in 2013, and in 2014 a new five-year phase 2 of the programme was implemented. The project's development and global environmental objective is to reduce land degradation and improve land productivity in selected watersheds in targeted regions in Ethiopia. This objective will be achieved through the provision of capital investments, technical assistance and capacity building for smallholder farmers in the watersheds and government institutions at national and sub-national levels.

The project has four components, and gender mainstreaming is included and emphasised within all four. The four components are: 1) Integrated Watershed and Landscape Management, 2) Institutional Strengthening, Capacity Development and Knowledge Generation and Management, 3) Rural Land Administration, Certification and Land Use and 4) Project Management

The programme seeks to incorporate women in all programme aspects, and at least 30 per cent of the resources allocated for Integrated Water and Landscape Management will benefit women. This includes resources allotted for the establishment of nurseries, CA/CF practices, irrigation structures, improved stoves, etc. The project also helps women to take the leadership position in areas that are traditionally recognized as women's domain including livestock production management, rainwater harvesting structures, water users associations, improved stove and wood lots development.

Direct and indirect beneficiaries of the project amount to an estimated 1 850 000 people.

EXAMPLE

WOCAN

Norway has supported the Women Organizing for Change in Agriculture and Natural Resource Management (WOCAN) with NOK 15 million for 2012-2014. WOCAN is a women-led international membership network of professions that provide expertise to assist agriculture and natural resource management organizations in strengthening women's leadership and in mainstreaming gender into their internal structures, programmes, projects and policies. The objective is to build women leaders and to mainstream gender at all levels of organizations, and strengthen the capacities of women and men leaders to bring about gender-responsive social change within the agriculture and natural resource management sectors.

The provision of core support from Norad has enabled WOCAN to strengthen its capacity in terms of human resources and implementation of activities contributing to its overall mission. After receiving training from WOCAN, rural women leaders in agriculture and natural resource management have been able to build self-confidence, skills and abilities to express their needs. WOCAN also trains men as supporters of women leadership and gender equality in many of its working areas.

Another important scope of WOCAN is to increase the amount of agriculture, climate change and natural resource management projects that incorporate gender issues. This includes collecting sex-disaggregated data, providing equal access to decision-making processes and benefit sharing for women and men and strengthening women's leadership and women's groups.

WOCAN has worked specifically with analysing the importance of women for the success of REDD+, and has contributed to the inclusion of women in several REDD+ initiatives.

GENDER IN THE FISHERY SECTOR



The operational aspects of fisheries and aquaculture with regard to fishing are generally handled by men, although women also fish, but then most often without the use of a vessel. Women are more involved in the processing and trade of fish and in small-scale operations like collection of organisms in the tidal belt, etc. It is clear that there is a need to improve awareness about women's roles, so that they are also seen and included in development projects.

In 2014 Norad supported the organisation of the conference on Gender in Aquaculture and Fisheries (GAF5), held in India. Norad also supported female participation from developing countries to the conference, which particularly aimed at concrete ways of increasing female involvement in the activities of NACA (Network for Aquaculture Centres in Asia-Pacific) and of AFS (Asian Fisheries Society). In other conferences on fisheries and aquaculture which got support in 2014, female participation was also prioritised.

To strengthen the gender dimension in the EAF Nansen Project, FAO arranged for a gender audit of the project in 2014. The audit provided several proposals at various levels of the project for how this aspect can be strengthened in the project.

The Norwegian NGO Royal Norwegian Society for Development (Norges Vel) has been supported to implement a fish farming project in Madagascar. It is reported that 50 per cent of the board members are women, and that this number also applies to women participating in the savings associations. Assisting women in the project area to have formal access to land is on track. By giving women access to land, they will be in a better position to successfully carry out the tilapia grow-out (production).

An international civil society organization supported by Norway, International Collective in Support of Fishworkers, based in India, publishes a newsletter called "Yemaya". The newsletter gives up to date information about issues of importance to enhance the gender perspective in fisheries.





The total Norwegian development support to food security projects in 2014 was NOK 1.2 billion. 18 per cent was channelled through core support to the multilateral organizations FAO, IFAD and CGIAR. 11 per cent was channelled to regional initiatives like NEPAD. Bilateral support is directed to individual countries, and accounted for 61 per cent of the support.

MULTILATERAL COOPERATION

The Food and Agricultural Organization (FAO) has a technical and normative mandate within agriculture, fisheries, forestry and food and nutrition security. Achieving food security for all is at the heart of the FAO's efforts – to make sure people have regular access to enough high-quality food to lead active, healthy lives.

FIGURE 9: DISTRIBUTION OFNORWEGIAN DEVELOPMENT

The FAO's three main goals are:

- The eradication of hunger, food insecurity and malnutrition
- The elimination of poverty and the driving forward of economic and social progress for all
- The sustainable management and utilization of natural resources, including land, water, air, climate and genetic resources for the benefit of present and future generations

The FAO houses and manages the Committee on World Food Security (CFS) together with IFAD and WFP. CFS was set up in 1974 as an intergovernmental body to serve as a forum for review and follow up of food security policies. In 2009 the Committee went through a reform process. The vision of the reformed CFS is to be the most inclusive international and intergovernmental platform for all stakeholders to work together in a coordinated way to ensure food security



FIGURE 10: NORWEGIAN DEVELOPMENT SUPPORT TO FOOD SECURITY BY GROUP OF AGREEMENT PARTNER (2014)



Agreement partners for Norwegian development support are a mix between public and private sector, NGOs and multilateral institutions. and nutrition for all. CFS shall address short term crises but also long term structural issues. They report annually to the Economic and Social Council of the United Nations (ECOSOC). Approximately NOK 210 million was allocated through FAO in 2014.

The International Fund for Agricultural Development (IFAD) is an international financial institution which provides loans and grants to national governments for interventions in rural areas in developing countries. IFAD is funded through replenishment cycles covering three year periods. For the current period (IFAD9), Norway is participating with NOK 90 million annually. In addition to IFAD9, the Adaptation for Smallholder Agricultural Programme (ASAP) was implemented in support of climate change adaptation. Norway contributed NOK 21 million through ASAP in 2014.

The World Food Programme (WFP) has its main focus on humanitarian assistance in crises, but also has a mandate to play a role in preventing humanitarian disasters. The programme is financed by voluntary contributions. In 2014, Norway contributed around NOK 409 million to WFP. WFP also receives Norwegian funds indirectly through CERF (UN Central Emergency Response Fund). Norway contributed in 2014 around NOK 130 million to WFP through CERF.

UN Women (UN Women's Organization) has both a normative and an operational mandate, and offers support to national partners for the implementation of international agreements and standards. It has a leading and coordinating role of the UN system's overall efforts on gender equality. Un Women supports development and dissemination of experience based knowledge and guidance on gender issues globally and at country level. Norway allocated approximately NOK 175 million to UN Women in 2014.

The World Bank (WB) works to reduce poverty by providing loans to low-income countries. Norway contributed in 2014 to two programmes closely linked to the international commitment towards food security: The Sustainable Land Management Programme (SLMP) in Ethiopia, which received NOK 72 million, and The Agricultural Sector Wide Approach Programme (ASWAp)

THE GLOBAL ALLIANCE FOR CLIMATE SMART AGRICULTURE

The Global Alliance for Climate Smart Agriculture (GACSA) was launched at the UN Climate Summit in September 2014. GACSA is a collaborative initiative to unify global, regional and national efforts for achieving food security in the face of climate change. The alliance seeks to enable 500 million farmers in Climate Smart Agriculture (CSA) practices in order to increase agricultural productivity and incomes, strengthen the resilience of food systems and farmers' livelihoods and curb emissions of greenhouse gases related to agriculture. In particular, the alliance will pursue actions that empower farmers, particularly smallholders, women and youth.

GACSA is an independent alliance, governed by its members through a strategic committee and its co-chairs. Norway has the sitting co-chair. The initiative was granted NOK 4.5 million in Norwegian support for developing the secretariat in FAO in 2014.

GACSA currently has 87 members from intergovernmental organizations, financial institutions, governments, research organizations, civil society and NGOs, farmer/fisher/forester organizations, and the private sector. A complete list of GACSA members can be found at: www.fao.org/3/a-au669e.pdf

in Malawi, which has been granted NOK 25 million over the period form 2011 till 2015.

The Consultative Group for International Agricultural Research (CGIAR) is a global partnership for agricultural research that unites 15 institutions engaged in knowledge generation for a food secure future. CGIAR research is dedicated to reducing rural poverty, increasing food security, improving human health and nutrition, and ensuring more sustainable management of natural resources. CGIAR research is run in collaboration with partner organizations, including national and regional research institutes, civil society organizations, academia, and the private sector. The CGIAR fund and bilateral contributions to the CGIAR research programmes (CRP) provide close to \$ 1 billion annually. CGIAR received NOK 144 million in Norwegian support in 2014.

REGIONAL COOPERATION

The New Partnership For Africa's Development (NEPAD), an agency under the African Union (AU), is the key regional organization for Norwegian cooperation on agriculture in Africa. NEPAD's strategic framework The Comprehensive Africa Agriculture Development Programme (CAADP) seeks to accelerate agricultural and rural development in Africa as a cornerstone for sustainable growth, poverty reduction and increased food security. A new CAADP framework was established in 2014 with the aim to close gaps in knowledge, skills and information among rural communities to adapt to climate change impacts. NEPAD also commissioned The Gender, Climate Change and Agricultural Support Programme (GCCASP) in 2012.

The Common Market for Eastern and Southern Africa (COMESA) is a free trade area with nineteen member states stretching from Libya to Swaziland. COMESA is collaborating with two other regional economic commissions, the East African Community (EAC) and the Southern African Development Community (SADC) in implementing the programme in 26 neighbouring states. Norway is supporting COMESA in developing national climate programmes in member countries. In 2011, Norway committed to a five-year agreement of NOK 116 million to support the COMESA climate programme. This programme received NOK 21 million in 2014.

The Conservation Agriculture Regional Programme (CARP) complements the COMESA climate change

REGIONAL SEMINAR ON AGRICULTURE AND FOOD SECURITY 21-23 OCTOBER 2014

The Norwegian embassy in Malawi, in collaboration with Norad and the MFA, arranged in October 2014 the annual regional seminar on agriculture and food security. These seminars are important forums for discussing experiences, opportunities and priorities, and to facilitate peer learning in implementing the strategy for food security.

More than 50 participants from the Norwegian Ministry of Foreign Affairs and Norad, as well as Norwegian embassies and partner organisations from Ethiopia, Malawi, Mozambique, Tanzania, Zambia and Zimbabwe attended the seminar. Malawi's Minister of Agriculture, Irrigation and Water Development, Hon. Dr. Allan Chiyembekeza opened the event.

A number of issues, challenges and solutions were presented and discussed. It was agreed to follow up these two issues:

1. Increase emphasis on how to integrate gender in ways that are meaningful, and that promote change beyond the numbers. First step might be to ensure that monitoring and evaluation frameworks be revised to disaggregate data by gender. Second step is to use these data to identify potential changes in mode of implementation and design of interventions.

2. Explore how a value chain approach can be implemented in the private sector in ways that benefit small holders. Identify both bottlenecks and low hanging fruits. It is important to share experiences so as to identify best practices.

programme. While COMESA supports policy and framework changes, the focus of CARP is to get small and medium scale farmers to adopt more climateresilient, environmentally sustainable and productive practices in Malawi, Kenya, Uganda and Tanzania.

Oceans, lakes and rivers are often shared between several countries. Cooperation between these countries will be necessary to ensure that there is a common approach to sustainable harvesting of shared resources, reduction of pollution of the aquatic environment and protection of habitats.

The EAF Nansen project is funded by Norway and managed by the FAO. The programme supports monitoring of the marine environment, fish resources and biodiversity. It also supports the development and implementation of management plans for targeted fisheries, particularly in Sub-Saharan Africa. Norway allocated NOK 66.8 mill. to the project in 2014.

The Bay of Bengal Large Marine Ecosystem Project (BOBLME) started up in 2009. BOBLME includes institutional cooperation on marine resource and environment management for the countries in South Asia and Southeast Asia facing the Bay of Bengal. Norway and Sweden have been the main bilateral contributors to the project, with an allocation of NOK 12 million from 2009. 2015 is the last year of the first phase of this programme.

BILATERAL COOPERATION

Bilateral development support is recognized first and foremost by the direct support from Norway to different actors in cooperation countries, where civil society groups and national research organisations receive the most significant shares. The exceptions are Malawi and Ethiopia, where support is also channelled through the World Bank.

The Norwegian bilateral agreements for development support to food security initiatives are consistent with targets set at regional and global level. Ethiopia, Malawi, Mozambique, Tanzania and Zambia are among Norway's key bilateral partners within the strategy for Food Security in a Climate Perspective.





FIGURE 12: NORWEGIAN DEVELOPMENT SUPPORT TO SUPPORT TO

FIGURE 13: NORWEGIAN BILATERAL DEVELOMENT SUPPORT TO FOOD SECURITY TO SIX COUNTRIES IN 2014







NORWAY'S KEY **BILATERAL PARTNERS** WITHIN THE STRATEGY FOR FOOD SECURITY IN A CLIMATE PERSPECTIVE

MALAWI

OFFICIAL NAME	Republic of Malawi
POPULATION (2013)	16.4 million
BELOW POVERTY LEVEL (<\$1.25/DAY)	72.2%
LIFE EXPECTANCY (2013)	55 years
HUMAN DEVELOPMENT INDEX RANK (2013)	174/187
NORWEGIAN BILATERAL DEVELOPMENT SUPPORT (2014)	NOK 532 million
NORWEGIAN DEVELOPMENT SUPPORT TO FOOD SECURITY PROJECTS (2014)	NOK 132 million

Norway is a significant bilateral cooperation partner in Malawi in the agricultural sector. The main goal is increased food security and poverty reduction. Promotion of CSA and increased private sector involvement with gender as a crosscutting issue are important means.

Norwegian aid to Malawi is channelled through Malawian authorities, civil society organizations and farmer organizations, and through national institutions such as Lilongwe University of Agriculture and Natural Resources (LUANAR).

Significant shares of the Norwegian funds have been provided to the government's sector programme for agriculture through the Agricultural Sector Wide Approach Support Programme (ASWAp-SP). In 2014 the support was used on efforts to increase efficiency of the use of water, land and nutrients, resilience to climate change and institutional capacity. The efforts have contributed to increased policy dialogue between development partners and Malawian authorities. This has partly led to an initial process to reform the national subsidy programme (FISP), and to increased access to hybrid seeds for a diversity of crops. Efforts have also been made to integrate Norwegian support to gender into the sector wide approach, with the aim to enhance gender sensitivity in policies and practices for increased food security.

AGRICULTURE SECTOR WIDE APPROACH, MALAWI

The Government of Malawi (GoM) has, in cooperation with developing partners, agreed to formulate the Agriculture Sector Wide Approach (ASWA) as a means for achieving agricultural growth and poverty reduction aligned with the Malawi Growth and Development Strategy (MGDS). The Agricultural Sector Wide Approach Programme (ASWAp) in Malawi received NOK 25 million in Norwegian support channelled through the World Bank in 2014.

The ASWAp is a single comprehensive programme and budget framework that has a formalized process for better donor coordination and harmonization of investment and alignment of funding arrangements between the Government of Malawi and donors in the agricultural sector. ASWAp is a priority investment programme within the CAADP framework and targets a 6 per cent annual growth of the agricultural sector in order to improve food security, diversify food production, improve nutrition at household level, and increase agricultural incomes for rural populations.



Support through civil society organisations emphasises a rural livelihood approach. Elements of this approach include resilience-building through CSA practices, promotion of agro-forestry, use of clean cook stoves, irrigation, crop diversity and establishment of village savings, loan groups and agrobusiness.

In 2014, most projects entered into their second or third phase, underlining the continuity in Norwegian support to the sector. The long-term partners have formed a network, the Network for Enhanced Agricultural Livelihoods (NEAL), for increased harmonization of key messages to beneficiaries and for experience-sharing.

ZAMBIA

OFFICIAL NAME	Republic of Zambia
POPULATION (2013)	14.5 million
BELOW POVERTY LEVEL (<\$1.25/DAY)	74.3%
LIFE EXPECTANCY (2013)	58 years
HUMAN DEVELOPMENT INDEX RANK (2013)	141/187
NORWEGIAN BILATERAL DEVELOPMENT SUPPORT (2014)	NOK 196 million
NORWEGIAN DEVELOPMENT SUPPORT TO FOOD SECURITY PROJECTS (2014)	NOK 120 million

The main intervention areas for Norwegian cooperation in Zambia concern the spread of climate resilient agricultural technologies, which is a main emphasis in most ongoing programmes related to food security.

The most important contributions from Norway in regard to food security in Zambia are channelled through organisations and programmes supported by the embassy in Lusaka. The predominant support goes to the Conservation Farming Unit (CFU) which has helped to increase food productivity and food security among small-scale farmers, and to establish CSA as a significant part of the country's agricultural policy.

Another important initiative is the Community Market for Conservation Agriculture (COMACO). COMACO has shown that increased food security and private sector development can be combined with conservation of unique natural resources. The embassy has also continued its support to two programmes working especially with women: The Programme Against Malnutrition (PAM), which contributes to training of women farmers, and the Non-Governmental Organizations Coordinating Council (NGOCC), which works to strengthen women's position in rural areas, as well as being a central actor in the national debate on women's rights.



AFRICA'S FIRST CONGRESS ON CA IN LUSAKA, ZAMBIA

Africa's first congress on CA was held in Lusaka, Zambia in March 2014. The congress gathered several hundred people from different African countries, as well as researchers and experts from other continents. The Norwegian-supported Conservation Farming Unit (CFU) received the first Conservation Agriculture Champions Award for its many years of work. Further, the congress confirmed Zambia's leading role in the increased interest for CA among African small-scale farmers. A number of farmers from different countries participated and confirmed that CA strengthens their ability to move beyond subsistence, towards getting access to supplies that can be sold on the market. However, the conference also underlined that much work still remains to spread the practices of CA among farmers in Africa.

TANZANIA

OFFICIAL NAME	United Republic of Tanzania
POPULATION (2013)	49.3 million
BELOW POVERTY LEVEL (<\$1.25/DAY)	43.5%
LIFE EXPECTANCY (2013)	61 years
HUMAN DEVELOPMENT INDEX RANK (2013)	159/187
NORWEGIAN BILATERAL DEVELOPMENT SUPPORT (2014)	NOK 482 million
NORWEGIAN DEVELOPMENT SUPPORT TO FOOD SECURITY PROJECTS (2014)	NOK 48 million



Tanzania has been among Norway's most significant bilateral development partners for decades. Through its support, Norway aims at promoting economic growth and poverty reduction. The majority of Tanzanians still live in rural areas and broad based growth must include the agricultural sector.

Norway's main contribution to agricultural development and food security in Tanzania over the years is the support to Sokoine University of Agriculture (SUA), which last year received approximately NOK 22 mill.

Furthermore, Norway supports The Southern Agricultural Growth Corridor (SAGCOT), a partnership between the Government of Tanzania, development partners and the private sector. SAGCOT's objective is to foster inclusive, commercially successful agribusinesses that will benefit the region's smallscale farmers, and in so doing, improve food security, reduce rural poverty and ensure environmental sustainability. Within the framework of SAGCOT, a programme has been developed together with AGRA, focusing on PPP in selected agricultural value chains. Preparatory work took place in 2014 but the programme is awaiting final approval.

The Tanzanian Agricultural Partnership (TAP) has also received continued Norwegian support in 2014. In alignment with the AGRA programme, TAP seeks to strengthen productivity and income among small farmers by developing value chains and market orientation, as well as building competence on climate-resilient agriculture through a publicprivate partnership (PPP) approach.

MOZAMBIQUE

OFFICIAL NAME	República de Moçambique
POPULATION (2013)	25.8 million
BELOW POVERTY LEVEL (<\$1.25/DAY)	60.7%
LIFE EXPECTANCY (2013)	50 years
HUMAN DEVELOPMENT INDEX RANK (2013)	178/187
NORWEGIAN BILATERAL DEVELOPMENT SUPPORT (2014)	NOK 376 million
NORWEGIAN DEVELOPMENT SUPPORT TO FOOD SECURITY PROJECTS (2014)	NOK 117 million

Norway is a significant development partner for the Mozambique fisheries sector, with an emphasis on promoting aquaculture as a sustainable and efficient platform for the establishment of a tilapia industry. This will allow for reinforcement of the food security situation, private sector development, employment creation and enhanced women's participation along the value chain.

Norway is also a significant development partner in the Mozambique agricultural sector. This especially concerns support to civil society organisations and local farmers' associations and unions in promoting CSA practices, with an especial emphasis on small-scale farmer empowerment and food security. Meanwhile, gender sensitive issues and private sector development are also underpinned as crucial in Norwegian bilateral support. Significant support has been allocated to The Cooperative League of the USA (CLUSA) for the Conservation Agriculture Promotion (PROMAC) since 2013. Norway also supports Norwegian People's Aid (NPA), which cooperates with two organisations that promote CA in Mozambique. In 2014, NPA launched a programme on conservation agriculture, gender and land rights. One of the goals of this programme is to ensure that women farmers in 6 provinces in Mozambique become more visible and can improve their status and role within the national farmers' union União Nacional de Camponeses (UNAC) and the Rural Association for Mutual Support (ORAM). Another goal is to provide training in the programme Women Can Do It (WCDI).



SUPPORT TO THE FISHERIES SECTOR IN MOZAMBIQUE

Since 2013, Norway has been scaling up its support to the fisheries sector in Mozambique. Within the period 2013-2017, Norway will contribute NOK 150 million to strengthening the Mozambican fisheries authorities in their ability to promote the development and management of small-scale fisheries and aquaculture, thereby improving the living conditions of artisanal fishing communities and small-scale farmers.

The primary focus of the project is to build, establish and manage the training and demonstration centre in Chókwè (CEPAQ), which is considered the cornerstone for establishing a freshwater aquaculture industry in Mozambique. The centre will develop genetically improved broodstock and high quality fingerlings, which are a necessity for profitable fish farming in Mozambique. The centre will also train and educate personnel and provide technical assistance and extension services to fish farmers.

By the end of 2014, some genetic enhancement and hatchery ponds were ready for use, and given that there are no setbacks, CEPAQ will be fully concluded in December 2015. The embassy recognizes that there is a potential for developing the tilapia value chain for entrepreneurs and medium size producers with high potential, who can then lead the way for and, over time, include other smaller and larger actors. The embassy is therefore in contact with the Royal Norwegian Society for Development to find out if a pilot tilapia grow-out project can be implemented from 2016.

ETHIOPIA

OFFICIAL NAME	Federal Democratic Republic of Ethiopia
POPULATION (2013)	94.1 million
BELOW POVERTY LEVEL (<\$1.25/DAY)	36.8%
LIFE EXPECTANCY (2013)	64 years
HUMAN DEVELOPMENT INDEX RANK (2013)	173/187
NORWEGIAN BILATERAL DEVELOPMENT SUPPORT (2014)	NOK 378.5 million
NORWEGIAN DEVELOPMENT SUPPORT TO FOOD SECURITY PROJECTS (2014)	NOK 104 million



Ethiopia has promoted investments in the agricultural sector as its foremost growth strategy for years. According to the World Bank, these investments have been the main contributor to the dramatic decrease in poverty that occurred between 2000 and 2011. The growth has continued within the Ethiopian strategy Climate Resilient Green Economy (CRGE), in which Norway is a significant partner through its support to REDD+, and energy and agricultural programmes. Human rights perspectives are integrated into the initiative and followed up with a particular focus on women's rights and gender equality, strengthening the role and participation of civil society, consultations with affected populations and transparency. Norwegian aid to Ethiopia is mostly channelled through the Climate Resilient Green Economy Facility (CRGEF), civil society organizations (both Norwegian and Ethiopian NGOs), multilateral organisations (The World Bank, UNDP, UNICEF, UNFPA) and bilaterally through the Ministry of Finance and Economic Development.

Since 2013, significant shares of the Norwegian support to agriculture have been provided to the Ministry of Agriculture, through a multi-donor trust fund managed by the World Bank. This support started in 2013 and will continue until the end of 2018. The fund is allocated to support The Sustainable Land Management Programme (SLMP),

UNIVERSITY COOPERATION IN ETHIOPIA

Norway has since 1996 supported collaboration between Hawassa and Mekelle universities in Ethiopia and the Norwegian University of Life Sciences (NMBU). Phase III of this collaboration went on from 2009 till 2013, and the end report was published in January 2014.

The long-term goal of this support has been to improve the livelihood of the rural communities and small scale farmers through strengthening of the universities in Ethiopia as drivers of development. Enhanced human capacity at the universities, increased development oriented research and training of rural farmers are believed to contribute to food security and rural livelihood improvements.

Short-term results in farmers' communities are also achieved through these programmes, by participatory research and dissemination. Mekelle University has been cooperating with 30 farmers' cooperatives in the research and outreach projects. They have supported the preparation and distribution of 15 extension, training and working manuals and the execution of 12 training programmes for farmers and other end-users. Hawassa University has selected 6 villages to serve as focal points for an integrated research effort addressing the specific needs at each site.

According to the end review, the programme has shown good achievements towards strengthening the two Ethiopian universities. However, more focus on results among the end beneficiaries are pointed out as a necessary improvement in the next phase of support to these institutions. An agreement for a new phase of the university support was signed in 2014. The overall development goal is Contributing towards Sustainable Development of the Nation. The project goal at Mekelle University is improved livelihood of the rural communities in the arid highlands of Ethiopia. The goal at Hawassa is Improved livelihoods of the rural communities in the Ethiopian rift valley region.

which seeks to reduce land degradation in selected landscapes in the Ethiopian highlands. Gender and environment are well addressed in the programme, and the main beneficiaries are smallholder farmers.

Support to Ethiopia is also channelled through civil society organisations. The Development Fund Norway works with more than 10 local NGOs in the area of sustainable land management and pastoral development interventions in the area of resilience-building, CSA practices, agro-forestry, irrigation, crop diversity, establishment of village savings, loan groups and agro-business. For more than two decades, Norway has supported the institutional cooperation programme between two universities in Ethiopia (Hawassa and Mekelle) and the Norwegian University of Life Sciences (NMBU) in research and education relevant to rural livelihood improvement and food security.

MALI

OFFICIAL NAME	République du Mali
POPULATION (2013)	15.3 million
BELOW POVERTY LEVEL (<\$1.25/DAY)	50.6%
LIFE EXPECTANCY (2013)	55 years
HUMAN DEVELOPMENT INDEX RANK (2013)	176/187
NORWEGIAN BILATERAL DEVELOPMENT SUPPORT (2014)	NOK 126 million
NORWEGIAN DEVELOPMENT SUPPORT TO FOOD SECURITY PROJECTS (2014)	NOK 21 million

Norway froze its development cooperation with Mali after the military coup in 2012, and redistributed planned support to humanitarian purposes. The intention was to re-establish the cooperation with Mali as soon as the political situation allowed.

After the restoration of democracy in Mali in late 2013, Norwegian development assistance has been gradually unfrozen, including support for climate resilient agriculture and prevention of famine. In 2014, Norway strengthened its efforts to increase food security, peace and reconciliation, good governance and strengthen democracy. In 2014, three main programmes were funded through the Norwegian Embassy in Accra: Adaptation of Agriculture and Pastoralism to Climate Change in Mali, which received NOK 9.57 million; Restoration of the Lake Faguibine System, which received NOK 8 million, and the Mali Climate Fund which recived NOK 7 million in 2014.

The ability of Norway to follow-up projects in Mali is particularly challenging for topics of a political nature, such as gender issues, women's property rights, trade issues and market access. All of these issues can have a crucial impact on climate resilient agriculture projects, and would normally be part of the political dialogue with the national authorities.



Abbreviations and acronyms

AGRA	Alliance for Green Revolution in Africa	NGO	Non-Governmental Organisation
AICC	African Institute for Corporate Citizenship	NMBU	Norwegian University of Life Sciences
ASWAp	Agricultural Sector Wide Approach	NORAD	Norwegian Agency for Development Cooperation
AU	African Union	NORFUND	Norwegian Investment Fund for Developing
CA	Conservation Agriculture		Countries
CF	Conservation Farming	NORHED	Norwegian Programme for Capacity Development
CAADP	Comprehensive Africa Agriculture Development		in Higher Education and Research for Develop- ment
	Programme	NPA	Norwegian People's Aid
CAP	Conservation Agriculture Programme	ORAM	Associação Rural de Ajuda Mútua
CARP	Conservation Agriculture Regional Programme	PAM	Programme Against Malnutrition
CERF	UN Central Emergency Response Fund	PP	Partnership Platform
CFS	Committee on World Food Security	PPP	Public-Private Partnership
CFU	Conservation Farming Unit, Zambia	PROMAC	Conservation Agriculture Promotion
CGIAR	Consultative Group on International Agricultural	PSD	Private Sector Development
	Research	REC	Regional Economic Community
CLUSA	Cooperative League of the USA	REDD+	Reducing emissions from deforestation and forest
COMACO	Community Markets for Conservation, Zambia		degradation
COMESA	Common Market for Eastern and Southern Africa	RNE	Royal Norwegian Embassy
CRGE	Climate-Resilient Green Economy	SADC	Southern African Development Community
CRP	CGIAR Research Programme	SAGCOT	Southern Agricultural Growth Corridor of Tanzania
CSA	Climate Smart Agriculture	SALFp	Sustainable Land Agriculture Lead Farmers
DF	Development Fund (Utviklingsfondet)		Programme, Malawi
EAC	East African Community	SHFSP	Southern Highland Food Systems Project
FAO	Food and Agriculture Organization	SLMP	Sustainable Land Management Programme
FARA	Forum for Agricultural Research	SRI	System of Rice Intensification
FISP	Farm Input Subsidy Programme	TAP	Tanzanian Agricultural Partnership
GACSA	Global Alliance for Climate Smart Agriculture	TARIPA	Tanzanian Rice Partnership
IFAD	International Fund for Agricultural Development	TLC	Total Land Care, Malawi
IFC	International Financial Corporation	TLS	Tillage Service Providers
IPCC	Intergovernmental Panel on Climate Change	UN	United Nations
	Illegal, unregulated and unreported fishing	UNAC	União Nacional de Camponeses de Moçambique
LUANAR	Lilongwe University of Agriculture and Natural Resources	UN Women	The United Nations Entity for Gender Equality and the Empowerment of Women
MACC	Management for Adaptation to Climate Change	WB	World Bank
MAP	Malawi Agricultural Partnership	WCDI	Women Can Do It
MFA	Ministry of Foreign Affairs	WFP	World Food Program
MLBP	Malawi Lake Basin Programme	WOCAN	Women Organizing for Change in Agriculture and
NAIP	National Agricultural Investment Plans		Natural Resource Management
NASFAM	National Smallholder Farmers' Association of	WRS	Warehouse Receipt Systems
	Malawi	ZFU	Zimbabwe Farmers Union
NEPAD	New Partnership for Africa's Development		



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