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Integrating Agriculture in National  
Adaptation Plans (NAP–Ag) Programme

*Safeguarding livelihoods and promoting  
resilience through National Adaptation Plans*

October 2018

*Case study*

**The Philippines**

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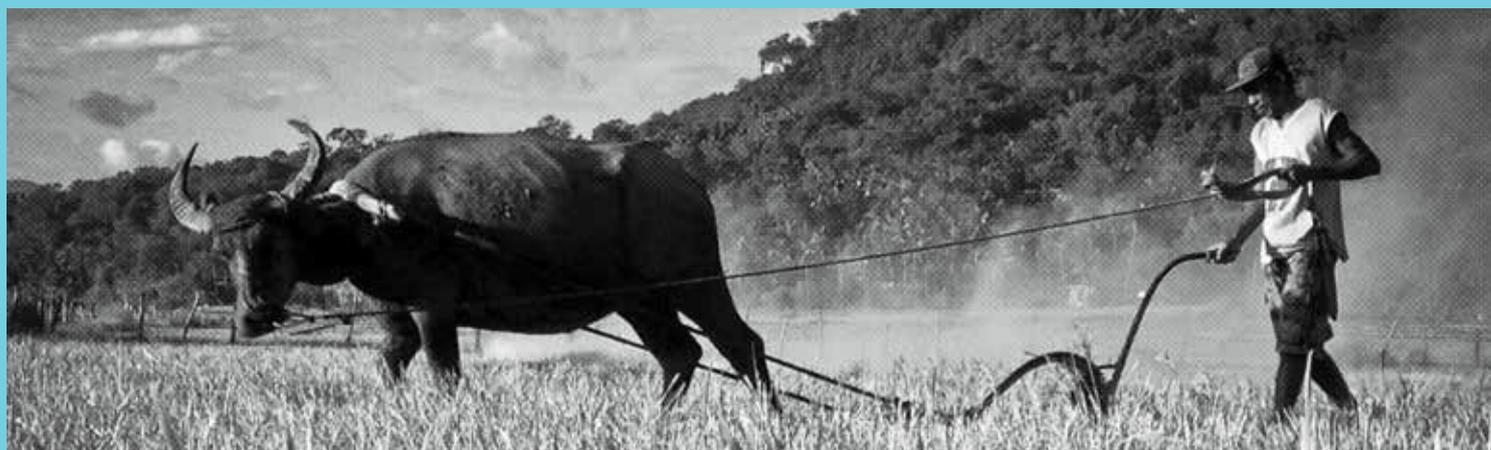
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## Acronyms

AFMP	Agriculture and Fisheries Modernization Plan	IKI	International Climate Initiative
AMIA	Adaptation and Mitigation Initiative in Agriculture	INDC	Intended Nationally Determined Contribution
ARBO	Agrarian Reform Beneficiaries Organization	LCCAP	Local Climate Change Adaptation Plan
ATI	Agricultural Training Institute	LGU	Local Government Unit
BMU	German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety	M&E	Monitoring & Evaluation
BSWM	Bureau of Soil and Water Management	NAP	National Adaptation Plan
CCA	Climate Change Adaptation	NAP-Ag	Integrating Agriculture in National Adaptation Plans
CCAM	Climate Change Adaptation and Mitigation	NCCAP	National Climate Change Action Plan
CCC	Climate Change Commission	NDA	National Designated Authority
CRI	Climate Risk Index	NDMA	National Drought Management Authority
DA	Department of Agriculture	NEDA	National Economic and Development Authority
DAR	Department of Agrarian Reform	OECD	Organisation for Economic Co-operation and Development
DENR	Department of Environment and Natural Resources	PAGASA	Philippine Atmospheric Geophysical and Astronomical Services Administration
DILG	Department of Interior and Local Government	PDP	Philippines Development Plan
DoST	Department of Science and Technology	PhilCCAP	Philippines Climate Change Adaptation Project
DRM	Disaster risk management	PSF	People's Survival Fund
DRR	Disaster risk reduction	RFO	Regional Field Offices
FAO	Food and Agriculture Organization of the United Nations	SDG	Sustainable Development Goals
FPOPD	Field Programs Operations Planning Division	SWCCO	Systems-wide Climate Change Office
GCF	Green Climate Fund	UAV	Unmanned Aerial Vehicle
GHG	Greenhouse gas	UN	United Nations
GIZ	German Corporation for International Cooperation (Deutsche Gesellschaft für Internationale Zusammenarbeit)	UNDP	United Nations Development Programme
IACCC	Inter-Agency Committee on Climate Change	UNFCCC	United Nations Framework Convention on Climate Change

## Highlights

- ➔ The Philippines is the fifth most climate-affected country in the world according to the 2018 Long-Term Climate Risk Index. Climate change is likely to exacerbate tropical cyclone intensity, drier seasons and extreme rainfall, which are already threatening farms and fisheries and eroding development gains in vulnerable regions such as Mindanao and the Visayas.
- ➔ Adaptation goals set out in the Intended Nationally Determined Contributions (INDC) of the Philippines were derived from the National Climate Change Action Plan (NCCAP) 2011–2028.
- ➔ The country's climate change response is coordinated by the Climate Change Commission (CCC). The CCC is updating the NCCAP to reflect new priorities identified from the Paris Agreement as well as the Philippines Development Plan (2017–2022). The NCCAP outlines adaptation and mitigation strategies based on seven thematic areas.
- ➔ Provincial and local governments are empowered to combat localized effects of climate change. Local Government Units (LGUs) – provinces, municipalities and *barangay* (village or ward) – are mandated by law to formulate their own climate change action plans (Local Climate Change Adaptation Plans (LCCAP)). To date, more than 300 LCCAPs have been approved by local legislative bodies.
- ➔ The agriculture sectors in the Philippines contribute 11 percent to Gross Domestic Product and employ 26 percent of the population. Crops account for half the total agricultural production followed by fisheries (17 percent) and livestock (16 percent) sub-sectors.
- ➔ As part of the process of updating the Agriculture and Fisheries Modernization Plan (AFMP), the Department of Agriculture (DA) is identifying ways to better incorporate and mainstream climate change adaptation (CCA) and disaster risk management (DRM). The NAP-Ag programme is supporting the DA with this process so that the impacts of climate change and disasters in agricultural sub-sectors, including fisheries, and strategies to address these impacts, are better reflected in future sector plans and activities.
- ➔ Given the reliance of farmers and fisherfolk on timely and accurate data, the NAP-Ag programme is supporting the Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA) to develop agriculture-relevant weather indicators, such as solar radiation constants and coastal surface wave height. This support also strengthens the capacity of the DA's Regional Field Offices (RFOs) on the use of PAGASA products for planning and operations.
- ➔ The NAP-Ag programme has also provided financial support and capacity to the DA's System Wide Climate Change Office to improve the integration of Disaster Risk Reduction (DRR) and adaptation planning into the DA's operations.
- ➔ In order to ensure future sustainability of sector adaptation activities, the DA is being supported by the NAP-Ag programme to leverage new funding. Projects will focus on: addressing gaps in the integration of sub-sector priorities into the NCCAP, supporting the implementation of LCCAPs and enhancing climate information services for farmers and fisherfolk in provinces most at risk to climate-related disasters.

## Case study objectives

This case study on the Philippines is part of a series that describes the steps taken to formulate and implement National Adaptation Plans (NAPs), with a particular emphasis on adaptation in agriculture (including forestry, livestock and fisheries). This series aims to provide national policymakers with valuable information from colleagues and counterparts in Asia, Africa and Latin America who are on the same adaptation planning journey to address the multiple challenges posed by climate change.

Each case study describes the contribution and lessons learnt from the UNDP-FAO Integrating Agriculture in National Adaptation Plans (NAP-Ag) programme, funded by the German Federal Ministry for the Environment, Nature Conservation and Nuclear Safety (BMU) through the International Climate Initiative (IKI). The contribution of this work to achieving national and international development and climate change goals (e.g. particularly the Paris Agreement and the Sustainable Development Goals) is also presented.

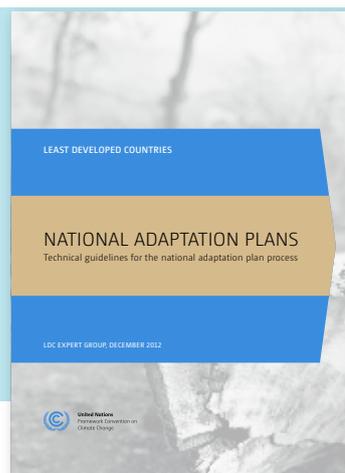
The case study series aims to show the links between long-term adaptation planning/NAPs and activities supported by the NAP-Ag programme in the Philippines as well as the resulting impacts. The preparation of this case study is based on a review of country reports and publications, as well as interviews with the NAP-Ag country coordinator and team members, representatives from agencies with CCA responsibilities In the DA, CCC, PAGASA, National Economic and Development Authority and partner organizations.

### Box 1

#### National Adaptation Plans (NAPs)

National Adaptation Plans were established in 2010 as part of the Cancun Adaptation Framework to enhance urgent action on adaptation and were adopted by Parties to the United Nations Framework Convention on Climate Change (UNFCCC) (Decision 1/CP.16.). NAPs enable countries to identify, prioritize and implement the most needed medium- and long-term adaptation actions. They aim to:

- reduce vulnerability to climate change by building adaptive capacity and resilience; and
- ensure that CCA is integrated into development planning in all sectors and at all levels of planning within the country.



**“While the Philippines is making significant strides toward more inclusive growth, [...] the challenge is to pursue economic development while simultaneously having to deal with the impacts of climate change and natural hazards.”**

(Republic of the Philippines Intended Nationally-Determined Contributions, 2015, p.1)

## Adaptation and the Paris Agreement

The Paris Agreement recognizes the urgent need for adaptation as a key component in our global responses to climate change. These responses are also necessary to safeguard countries' progress towards the achievement of Sustainable Development Goals (see Box 2). Most of the INDCs submitted ahead of the Agreement's entry into force include countries' adaptation goals, priorities, actions and needs.

The Philippines ratified the UNFCCC in 1992 and signed the Kyoto Protocol in 1998. The country submitted its INDC in October 2015 ahead of the Paris Agreement,<sup>1</sup> which it ratified in 2017. The INDC emphasizes adaptation as an “anchor strategy” and prioritizes the strengthening of climate information and monitoring, resilience of ecosystems and key sectors (agriculture, water, health) to climate change and disasters and improved risk assessment of climate extremes and impacts. The Philippines is also committed to implementing the Sendai Framework on Disaster Risk Reduction (2015-2030).

### Box 2

#### Climate change and the Sustainable Development Goals (SDG)

Climate change has implications for each of the 17 Sustainable Development Goals (SDGs). National Adaptation Plans (NAPs) play an important role as a means of SDG implementation. In the agricultural, livestock and forestry sectors, adaptation can contribute to sustainable food production systems as well as the development of resilient agricultural practices, and ultimately of SDG Goal 2 to achieve Zero Hunger. The SDG Goal 13 on climate change, explicitly highlights adaptation as a key mechanism to combat climate change and its impacts, with targets to:

- Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters.
- Integrate climate change measures into national policies, strategies and planning.
- Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

The implementation of the tentative policies and measures outlined in the Philippines' INDC will be guided by the updated NCCAP, which was created in 2011. In 2017, at the 23rd UN Climate Change Conference (COP23), the Chair of the Philippines' Senate Committees on Foreign Relations, Climate Change and Finance, Senator Loren Legarda was named a NAPs champion. Although the Philippines has not submitted a NAP document, the country's progress towards national adaptation planning and budgeting is relatively advanced with its comprehensive intergovernmental framework, NCCAP and results-based monitoring framework.

## Climate change & agriculture

An archipelagic country, the Philippines is composed of more than 7 600 islands divided into three main island groups: Luzon, Mindanao and the Visayas. The agriculture sectors – crops, livestock, forestry and fisheries - employ 26 percent of the labour force and contribute 11 percent to the country's Gross Domestic Product. In terms of quantity and value of commodities produced, paddy

<sup>1</sup> The Philippines' Intended Nationally-Determined Contribution. 2015. Available online: <http://www4.unfccc.int/submissions/INDCPublished%20Documents/Philippines/1/Philippines%20-%20Final%20INDC%20submission.pdf>

rice dominates, followed by crops like coconut, banana, sugarcane and maize. Capture fisheries and aquaculture production have been increasing, with aquaculture production doubling since 1995. The sector contributes 37 002.69 GgCO<sub>2</sub>e (gigagrams of carbon dioxide equivalent) in GHG emissions,<sup>2</sup> although urban growth and transportation-related emissions, waste and energy are the biggest contributors.

***“Farmers deal with massive amounts of risk on a lot of fronts. The problem with climate change is that a lot of the risks that farmers face are no longer calculable risks, but uncertainties. The important job of science is to enable people to grapple with uncertainties and convert them back into calculable risks.”***

Dr. Segfredo Serrano, Undersecretary for Policy and Planning, Department of Agriculture, The Philippines

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The Philippines is consistently ranked as one of the most highly climate-vulnerable countries in the world. Climate change and climate-related disaster events have disproportionate effects on the agriculture sectors in the Philippines. The Long-Term Climate Risk Index (CRI) lists the Philippines as the fifth most affected country, with 289 disaster events occurring between 1997 and 2016.<sup>3</sup> The country experiences an average of 20 strong typhoons a year. Floods, landslides and mudslides triggered by storms pose risks to agricultural lands and stocks, threatening food security and the livelihoods of households involved in farming and fisheries. The 2013 Typhoon Haiyan destroyed hundreds of thousands of hectares of rice fields, coconut plantations, affecting over one million farmers and fisherfolk.<sup>4</sup> In late 2016, the Typhoons Haima and Sarika were estimated to have affected 171 000 households, causing USD 236 million in damages to the agriculture sector and leading to losses of 648 656 tonnes of rice, corn and high value crops.<sup>5</sup>

Apart from storms, extreme effects arising from the El Niño Southern Oscillation also threaten the agriculture sector. It is estimated that the ensuing extreme wet and dry seasons have led to USD 325 million worth of total damage and production losses to crops.<sup>6</sup> Losses of arable land, crops and stock pose a long-term challenge to the recovery of livelihoods. The NCCAP views the reduction of vulnerability to the increasingly frequent and severe extreme weather events as key to building resilience to climate and weather-related hazards.

2 Climate Change Commission, 2000. The Philippines National Climate Change Action Plan 2011-2028. Manila: CCCC, p. 25

3 Eckstein, D. Künzel, V. and Schäfer, L. Global Climate Risk Index 2018. Briefing Paper. Germanwatch. Available online: <https://germanwatch.org/sites/germanwatch.org/files/publication/20432.pdf>

4 FAO, 2015. Typhoon Haiyan, Portraits of Resilience. Manila: Food and Agriculture Organization of the United Nations. Available online: <http://www.fao.org/3/a-i5177e.pdf>

5 FAO, 2017. Typhoon Haima and Sarika. Factsheet. Available online: <http://www.fao.org/3/b-i7103e.pdf>

6 FAO, 2017. El Niño & La Niña in the Philippines. Available online: <http://www.fao.org/3/a-i6775e.pdf>

## Frameworks & institutions for climate change coordination

The Philippines is an early responder to climate change. The country's first committee on the issue, the Inter-Agency Committee on Climate Change (IACCC), was created in 1991 and comprised 15 government agencies and non-governmental representatives. In 2015, climate budget tagging was mandated for all national budget submissions for all governmental entities.<sup>7</sup>

Table 1 lists some of the key climate specific national policy documents developed since 2009.

**Table 1**

### Key climate specific policy documents

Year	Title
2009	Climate Change Act
2010	Philippine Disaster Risk Reduction and Management Act
2010	National Framework Strategy on Climate Change
2011	Second National Communication
2011	National Climate Change Action Plan
2012	Creation of the People's Survival Fund (Amendment to Climate Change Act)
2014	NCCAP Results-based Monitoring and Evaluation System
2014	Guidelines on the formulation of LCCAP
2015	Amended Fisheries Code
2015	Submission of the Philippines' INDC

8

The Climate Change Act of 2009 (Republic Act 9729) created the CCC and facilitated the development of the NCCAP (2011-2028). The CCC coordinates the country's climate change response. The goal of the National Framework Strategy on Climate Change (2010-2022) is "a climate risk-resilient Philippines with healthy, safe, prosperous and self-reliant communities, and thriving and productive ecosystems."<sup>8</sup>

The Philippines Development Plan (PDP, 2017-2022), covering the period of a Presidential term, provides the overarching framework for the NCCAP and other sectoral and thematic plans. The PDP is in turn anchored in the national long-term plan – *Ambisyon 2040*. The NCCAP is currently undergoing an update to reflect the priorities of the latest Philippines Development Plan (2017-2022).

The current NCCAP outlines mitigation and adaptation actions across seven strategic priorities:

- I. Food security
- II. Water sufficiency
- III. Ecological and environmental stability
- IV. Human security
- V. Climate-smart industries and services
- VI. Sustainable energy
- VII. Knowledge and capacity development

Through the NCCAP (2011-2028), CCA and DRR will be integrated into the country's plans and programmes at all levels – national, regional and local. Figure 1 highlights the institutional framework for climate change governance and the departments and their respective bureaus implementing climate-related activities in coordination with the CCC.

<sup>7</sup> Le, H. and Baboyan, K. 2015. Climate budget tagging: Country-driven initiative in tracking climate expenditure. UNDP. Available online: [https://www.climatefinance-developmenteffectiveness.org/sites/default/files/event/CFSDforum2015/climate/Climate%20Budget%20Tagging%20July%202015\\_DRAFT.pdf](https://www.climatefinance-developmenteffectiveness.org/sites/default/files/event/CFSDforum2015/climate/Climate%20Budget%20Tagging%20July%202015_DRAFT.pdf)

<sup>8</sup> National Framework Strategy on Climate Change, 2010.

Figure 1

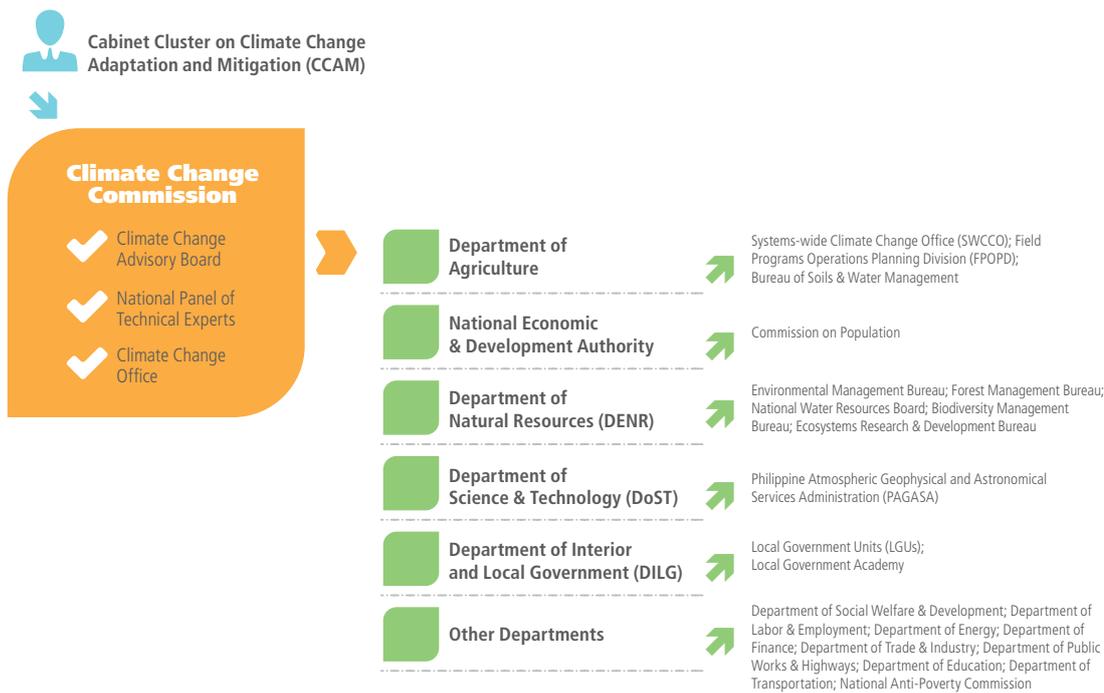


Figure 1: “Institutional framework for climate change coordination in the Philippines”

Below is a brief description of some of the keys bodies, with a focus on entities working on NAP-Ag implementation:

The **CCC** has been housed under the Office of the President since 2009, succeeding the Inter Agency Committee for Climate Change set up in 1991 under the Department of Environment and Natural Resources. The CCC is the National Designated Authority (NDA) and focal point for interactions with the Green Climate Fund (GCF). The CCC also co-chairs the NAP-Ag programme’s project steering committee.

The **DA Systems-Wide Climate Change Office (SWCCO)** coordinates projects related to climate change that cut across policy instruments and agencies of the Department in order to address climate change vulnerabilities and risks while implementing the country’s agriculture and fisheries modernization programmes. NAP-Ag activities build on the current Adaptation and Mitigation Initiative in Agriculture (AMIA) project, a flagship programme coordinated by the DA-SWCCO that pilots agriculture and fishery support services to selected villages to help build their resilience against climate change and disaster risk.

The **DA’s Field Programs Operational Planning Division (FPOPD)** is a division under the Field Operations Services, which coordinates the timely delivery of goods and services to the LGUs. The FPOPD translates strategic plans into operational programmes. Within this Division, the Disaster and Climate Information Office collects and analyses DRR and CCA data, and ensures the coordination and monitoring of CCA and DRM. The Office has recently initiated a programme deploying unmanned aerial vehicles (UAVs or drones) for pre- and post-disaster assessments. The Division is tasked with mainstreaming adaptation into the routine operations of the Department of Agriculture.

The **Bureau of Soil and Water Management (BSWM)** has been at the forefront of adaptation work in the agriculture sectors through its network of extension service providers. In particular, the Bureau supported the adoption of a wide range of field-level adaptation guidance in collaboration with the Agricultural Training Institute (ATI) through the Philippines Climate Change Adaptation Project (PhilCCAP) from 2011 to 2016.

**“The important thing is that you’re able to shape and change the way people run the programmes and the way they think. It cannot be business-as-usual.”**

Dr. Segfredo Serrano, Undersecretary for Policy and Planning, Department of Agriculture, The Philippines)

The **National Economic and Development Authority (NEDA)** is the country’s socioeconomic planning body, coordinating the formulation of plans, policies and programmes to set the parameters for national and subnational development. The agency is responsible for the formulation of the Philippine Development Plan through a participatory process involving all agencies.

The **Philippine Atmospheric Geophysical and Astronomical Services Administration (PAGASA)** of the Department of Science and Technology (DOST) is the Philippines’ national meteorological and hydrological services provider. Through its Climate and Agrometeorological Division, PAGASA is working towards more targeted climate change-related information and advisories relevant to cropping, livestock, fisheries and aquaculture activities.

In consultation with the CCC, the **Department of the Interior and Local Government (DILG)** and the Housing and Urban Development Coordinating Council formulated guidelines and assisted LGUs in developing the LCCAP, mandated by Section 14 of the Climate Change Act. To date, more than 300 LCCAPs have passed the approval of local (municipal, provincial, or *barangay*) government. The DILG assists LGUs in accessing the People’s Survival Fund which finances the implementation for CCA and DRM projects at the local government levels (see Box 3).

The **Department of Agrarian Reform (DAR)** has been active in identifying and rolling out technologies for adaptation and mitigation. Support comes under its Climate Resilient Farm Support Programme and is targeted at the Agrarian Reform Beneficiaries Organizations (ARBOs).

### Box 3

#### The People’s Survival Fund

The People’s Survival Fund is the Government of the Philippines’ flagship climate finance programme. The PSF was established by the Republic Act No. 10174 with an allocation of PHP 1 billion yearly. The PSF originated from the need to empower local government units and communities at the forefront of climate change impacts. The PSF provides long-term finance streams to these beneficiaries (including accredited community organizations) for a range of activities to help local communities combat climate change. These include vulnerability assessments, monitoring of vector-borne diseases, forecasting and early-warning systems, institutional development for local government, risk financing and community adaptation support programmes. For example, the NAP-Ag programme is supporting LGUs to apply for the PSF for the design of LCCAPs. There is a call for proposals twice a year. Applicants are encouraged to think outside of ‘business-as-usual’ and to ground their proposals in sound climate science.

## Adaptation planning for the agriculture sectors

The DA is one of the key departments working in close coordination with the CCC. Adaptation planning at the DA is housed under the SWCCO, which administers the AMIA programme, the umbrella programme covering all climate change-related programmes in the DA. Support is being mobilized for the scaling-up of the AMIA programme, for example extending pilot villages and enhancing the DA’s efforts to collect and use climate information for agriculture sector planning.

As the Philippines is fairly advanced amongst developing countries for its early adoption of climate action, the NAP-Ag programme, launched in October 2016, aimed to deepen a number of priority areas identified in collaboration with key agencies and stakeholders. NAP-Ag work in

the Philippines has focused primarily on improving capacities for decision-making, integration of adaptation and DRR into sectoral plans, and improved decision-making and planning for adaptation and DRM for farmers, fisherfolk and local government units. These work areas build on past and ongoing initiatives in the DA and the Philippine Rural Development Project, as well as national planning stakeholders such as the CCC, the National Economic Development Authority and the meteorological services (see Table 2).

**Table 2**

**Agriculture and climate change related adaption projects in the Philippines**

Year	Title
2008	Strengthening the Philippines’ Institutional Capacity to Adapt to Climate Change. FAO
2011-2016	Philippines Climate Change Adaptation Project. World Bank
2012	Enhancing Capacities for Disaster Risk Reduction in Agriculture in Cambodia and the Philippines. FAO
2012	Assessments of Climate Change Impacts and Mapping of Vulnerability to Food Insecurity under Climate Change to Strengthen Household Food Security with Livelihoods’ Adaptation Approaches. FAO
2013	Climate Public Expenditure and Institutional Review. World Bank
2014	Consolidating Capacities for Disaster Risk Reduction in Agriculture and Fisheries. FAO
2014	Scaling Up Risk Transfer Mechanisms for Climate Vulnerable Agriculture based Communities in Mindanao – Weather Index based Insurance (WIBI) Mindanao Project. UNDP
2014-2021	Philippine Rural Development Project. World Bank
2015	Adaptation and Mitigation Initiative in Agriculture (AMIA). DA, The Philippines
2015	Adaptation and Mitigation Initiatives in Philippine Rice Cultivation. UNDP
2015	Building Capacities for a Climate Resilient Tilapia Farming in the Philippines. FAO
2015-2019	Support to the Philippines in shaping and implementing the international climate regime (Support CCC). GIZ
2017	Development of an Enhanced Production and Risk Management in Agriculture Integrated Decision Support System. FAO
2017	Supporting Aquaculture Resources Mapping and Development Planning Through ICT-based Solutions. FAO
2018	The Paris Agreement in action: scaling up Forest and Landscape Restoration (FLR) in the context of the Bonn Challenge to achieve the NDCs by promoting joint mitigation and adaptation approaches in Africa, Pacific Islands and the Mediterranean. FAO
2018	Fishing for Climate Resilience: Empowering vulnerable, fisheries dependent communities adopt ecosystem-based-adaptation measures to secure food and livelihoods. FAO

The NAP-Ag programme engages with the framework laid down by the UNFCCC Technical Guidelines for the NAPs process (2012), which recommends four components in the preparation of a NAP:

**Element A** – Lay the groundwork and address gaps

**Element B** – Preparatory elements

**Element C** – Implementation strategies

**Element D** – Reporting, monitoring and reviewing

The programme has a budget of USD 700 000 to implement priority adaptation activities until 2019. It supports ten other countries, all of which have drawn up different activities to advance a transparent, gender-sensitive NAPs process according to four main outcomes (see Box 4).

## Box 4

## NAP-Ag programme outcomes

1. **Strengthen technical capacity** - Building up partner countries use of appropriate tools and analyses to assist key ministries with investment planning and budgeting
2. **Develop integrated roadmaps for NAPs** - Strengthening the technical capacity of individuals and institutions to develop a roadmap of economically viable, gender-responsive, medium- to long-term adaptation options for the agriculture sectors
3. **Improve evidence-based results for NAPs** - Developing and introducing impact assessment frameworks for the agriculture sectors, which generate evidence-based results and can be used in policy dialogues (e.g. on adaptation planning and monitoring, tracking and reporting)
4. **Promote agricultural NAPs through advocacy and knowledge sharing** - Sharing and providing information to other countries and sectors on how to integrate adaptation needs into national planning and budgeting processes.

The *Supplementary Guidelines* to the NAP Technical Guidelines, focused on the agriculture sectors and NAPs,<sup>9</sup> provides further elaboration of how agriculture sectors can further mainstream climate change and DRR in parallel with national adaptation planning processes. Table 3 reproduces some of these elements as they relate to the agriculture sectors and NAP-Ag activities conducted in the Philippines that correspond to these elements.

Table 3

## Integrating agriculture sector adaptation priorities and climate change and disaster risk management within a NAP framework

Step	A. Laying the groundwork and addressing gaps	Status	Activities
1	Initiate participation of representatives from the agriculture sectors in national adaptation planning, including clarifying mandates and engaging focal points for the different sectors	Completed	NAP-Ag inception and stakeholder workshop; National and sub-national policy dialogues on landscape planning for mainstreaming CCA/DRR in the agriculture and fisheries sectors
2	Take stock of existing vulnerability and risk assessments, knowledge, methodologies, and possible capacity and institutional gaps, policies, plans and investment frameworks in the agriculture sectors	Completed	Stock-taking report and recommendation for roadmap for advancing the Philippines' NAP process; Report on progress in integration of CC-DRR in the updating of the AFMP
3	Address capacity gaps and weaknesses in adaptation planning in the agriculture sectors	Ongoing	Awareness-raising and capacity building of national and regional field offices in implementing landscape-based climate change risk assessment and adaptation and DRR planning approaches
4	Assess and identify links between adaptation needs and development goals in the agriculture sectors	Ongoing	Assessment of progress in integrating CC-DRR in update of the AFMP
Step	B. Preparatory elements	Status	Activities
5	Analyse current and future climate scenarios for production and sustainability	Ongoing	Development of Enhanced Seasonal (three month) Climate Products for agriculture and fisheries; Support for the development of a national climate information system for agriculture and fisheries in the Philippines; Support for project preparation for accessing the GCF

9 FAO, 2017. Addressing Agriculture, Forestry and Fisheries in National Adaptation Plans. Available online: <http://www.fao.org/3/a-i6714e.pdf>

6	Assess climate impacts, risks and vulnerabilities and identify adaptation options for the agriculture sectors	Ongoing	Possible impact analyses of farm-gate prices (pending)
7	Select and appraise adaptation options in the agriculture sectors	Ongoing	Climate-resilient gender-responsive value chain analysis with a focus on the bamboo value chains
8	Compile and communicate agricultural perspectives for NAPs	Ongoing	Training on development of LCCAPs; PAGASA training on agricultural advisories
9	Review the integration and alignment of CCA in the agriculture sectors in development planning and NAPs, including national, subnational and sectoral and subsectoral plans	Ongoing	Preparation of options to integrate CCA and DRR in update of the AFMP
<b>Step</b>	<b>C. Implementation strategy</b>	<b>Status</b>	<b>Activities</b>
10	Ensure appropriate priority for the agriculture sectors in national adaptation planning and NAPs	Completed	Active involvement of the climate change coordinating body, the CCC, as the co-chair of the project steering committee
11	Develop a long-term adaptation implementation strategy that includes potential options for scaling up adaptation actions and leveraging climate finance	Ongoing	Update of the AFMP integrating CC-DRR
12	Improve capacity for planning and implementing adaptation in the agriculture sectors	Ongoing	Funding for establishment of DA's Disaster Climate Information Office; Gender mainstreaming assessment and training; Enhancement of government capacities to access climate financing mechanisms such as the GCF and People's Survival Fund; Training for Regional Field Officers on the use of climate information products
13	Promote coordination and synergies at the national and subnational level	Ongoing	People's Survival Fund proposal development support for LGUs
<b>Step</b>	<b>D. Reporting, monitoring and review</b>	<b>Status</b>	<b>Activities</b>
14	Prepare for monitoring adaptation planning and implementation in the agriculture sectors	Ongoing	Identification and Development of Criteria and Indicators for M&E on CCA and DRR; M&E Training
15	Review the national planning process assessing how the agriculture sectors are being addressed	Ongoing	Activities under development
16	Monitor and iteratively update the process of adaptation planning and implementation in the agriculture sectors	Ongoing	Training on Monitoring & Evaluation (M&E) (pending)
17	Outreach on the process, and report on the alignment of NAP/NAP-Ag progress and effectiveness	Not started	Support for knowledge exchange with global and regional NAP and networks

The key milestones achieved as a result of the NAP-Ag programme in the Philippines between mid-2016 and October 2018 include:

### **Outcome 1**

#### **Guidelines for landscape-based integrated area development planning formulated -**

A landscape approach takes ecological units such as watersheds as the basic unit of analysis for planning and decision-making based on the interconnectedness of ecosystems and vulnerabilities within the unit, which provides the opportunity of delivering more relevant and timely services.

The Guidelines for Landscape-based Integrated Area Development Planning were developed through NAP-Ag support to enhance the capacities of regional and provincial agricultural technical officers, universities and colleges in watershed-based integrated area development planning.

**Improved capacities for adaptation planning and decision-making** - Capacity building efforts have been undertaken to meet two major priorities. Alongside the development of new climate indicators to better inform cropping and coastal fisheries, PAGASA is conducting training on the formulation of agriculture-oriented advisories from weather information. Another is the training of representatives of LGUs from Mindanao, one of the agricultural regions most at risk of typhoon-related impacts, to apply for funding from the People's Survival Fund. Upcoming capacity building efforts will focus on gender-sensitive adaptation planning and designing monitoring and evaluation frameworks.

**Improved seasonal forecasts and advisories for farmers and fisherfolk** - NAP-Ag support contributes to the long-term goal of developing a national climate information system tailored to the agriculture sectors. Existing climate information needs to be enhanced to provide more targeted forecasts for farm and fisheries operations. NAP-Ag funding has enabled the national meteorological authority, PAGASA, to develop municipal-level ten-day forecasts for solar radiation and is currently developing solar radiation and sea wave height variables to enable fisherfolk and farmers to improve forecasting of conditions for planting and fishing. A second component of support is capacity building for regional and provincial agricultural officers to prepare agriculture and fisheries advisories based on these seasonal forecasts. One of the challenges has been the lack of baseline and historical data, such as coastal wave height, with which to create secondary indicators.

## **Outcome 2**

**Preparation for the update of the AFMP initiated** - Together with the World Bank-supported Philippine Rural Development Project, the NAP-Ag programme supports meetings, scoping and development of a report on an update of the AFMP that would integrate CCA, DRM and gender considerations into agricultural policy. This update provides an improved analysis of the impacts and challenges of mainstreaming CCA and DRM into the AFMP.

**Climate finance for adaptation planning priorities leveraged** - To ensure sustainability of support, NAP-Ag is also helping country teams and agencies to leverage future climate finance. To date, funding proposals are being developed to address gaps in the design of agricultural investment plans, climate information provision, local-level implementation of climate actions and the integration of relevant irrigation, water and aquaculture priorities into the NCCAP.

## **Outcome 3**

**Review of M&E frameworks** - Work is under way to review and provide recommendations to improve existing systems for monitoring and evaluating agriculture and CCA/DRR policies and programmes. This activity includes analyses of guidelines for integration of CCA/DRR priorities into the existing M&E protocols of the DA.

## **Outcome 4**

**Climate and disaster risk mainstreamed into DA operations** - A Disaster Risk and Climate Information Office was established in the DA's FPOPD through NAP-Ag support. The office has strengthened the coordination and monitoring of CCA and DRRM mainstreaming by providing a interface between the SWCCO and the department's routine operations units as well as with PAGASA. The Office houses adaptation- and DRRM-specific data collection (such as drone operations) and has begun to provide related decision-support tools.

## Lessons learnt

This UNDP-FAO NAP-Ag programme has made considerable progress since its inception in 2016. The following are some success factors and lessons learnt to date:

- **High-level commitment for national climate change governance ensures CCA remains a firm priority across all sectors** - The CCC is housed under the Office of the President and led by three Commissioners. This solidifies the government's strong commitment to building communities' resilience to disaster risk and climate change across sectors and levels of government.
- **When local-level climate change action becomes enshrined as law, this creates transformative change not only horizontally but vertically** - The Philippines' Climate Change Act of 2009 was made a Republic Act and is one of the earliest laws among developing countries to comprehensively address climate change. The Act goes one step further by mandating that LGUs formulate their own LCCAP. Since then, more than 300 LGUs have approved LCCAPs and are leveraging resources to implement adaptation actions at the provincial, municipal and *barangay* levels.
- **Implementation of climate action at local levels must be supported by resources, guidance and incentives to be successful** - Key resources such as the PSF have helped hundreds of LGUs to formulate plans to reduce climate and disaster risk and build resilience. LGUs are supported to develop adaptation plans through guidelines by the Department of the Interior and Local Government in consultation with the CCC. External partners such as the NAP-Ag programme are training LGUs to harness PSF and other resources.
- **Each agency should have a budget line for Inter-sectoral coordination in order to improve coordination on cross-cutting thematic areas** - A challenge for climate change coordination has been the lack of ownership of agencies for cross-cutting NCCAP thematic areas such as food security, human security and ecological stability. Without an accompanying budget line dedicated to inter-agency coordination around climate change, departments have less incentive to prioritize joint action on such thematic areas. Moves toward greater clarity of roles and responsibilities of different agencies, including on how the CCC provides oversight, will further enhance inter-sectoral coordination and adaptation outcomes.
- **Making available climate information relevant to agriculture sector-specific needs and priorities requires an interface for a common understanding on needs and resource limitations** - In its support to PAGASA to develop additional climate information services for crops and fisheries (solar radiation and coastal wave height), the NAP-Ag programme contributed to enhanced understanding between the meteorological services and agriculture sector agencies on the application of different services, the proper interpretation of meteorological data products, necessary infrastructure requirements for service delivery and data collection challenges. A common understanding of the climate information needs and capabilities of different agencies is essential for more effective collaboration in the delivery of climate and disaster risk information to agricultural stakeholders.
- **The updating of sector development plans can help harmonize CCA activities.** Fisheries, livestock and post-harvest activities currently do not have dedicated CCA programmes. In the absence of these, the AFMP has become an entry point for ensuring that CCA and DRR in these sub-sectors are included. The mainstreaming of climate and disaster resilience priorities within key sectoral policies plays an important role in bringing these issues to the forefront.

The priority areas that the NAP-Ag programme will be working on through to the end of 2018 include: recommendations to policymakers on mainstreaming CCA and DRR in the AFMP; securing future funding through bilateral and multilateral funds to further address gaps in the implementation of adaptation activities at the local and sub-sectoral levels; assessment of gender mainstreaming needs; capacity building on gender mainstreaming and prioritization of adaptation options; and training on the monitoring and evaluation of adaptation projects.



## Further information

### Guidelines:

- UNFCCC National Adaptation Plan – Technical guidelines for the national adaptation plan process (2012)
- Addressing Agriculture, Forestry and Fisheries in National Adaptation Plans – Supplementary guidelines (2017)

### The Philippines:

- Guidelines on the Formulation of Local Climate Change Action Plans, 2014
- Agriculture and Fisheries Modernization Act, 1997
- National Climate Change Action Plan, 2011-2028
- Intended Nationally Determined Contributions, 2015
- Inception report of the NAP-Ag programme, 2017

### Others:

- Agricultural Policies in the Philippines, OECD Food and Agricultural Reviews, OECD, 2017
- Philippines – Data, World Bank Group, 2017

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