Submissions on topics 2 (b) (Methods and approaches for assessing adaptation co-benefits and resilience) and 2 (c) (Improved soil carbon, soil health and soil fertility under grassland and cropland as well as integrated systems, including water management)

[Decision 4/CP.23, Para. 2(b) and 2(c)]

Submission by the Philippines 17 June 2019

## 1. Background:

As a country highly vulnerable to the impacts of climate change, the Philippines prioritizes adaptation measures for agriculture <sup>1</sup>, with co-benefits of mitigation. It considers agriculture as unique and quite different from the other sectors in the sense that it is both a source of greenhouse gas (GHG) emissions and a recipient sector of the impacts of climate change. As such, it offers opportunities for attaining both mitigation and adaptation goals. It is a sector which provides a unique opportunity to apply an integrated approach to GHG mitigation and adaptation.

The Philippines firmly believes that to address the cause and manifestation of the climate change problem in this sector, the dominant issue must be dissected - in this case, adaptation, as the impacts outweigh the gravity of the cause. By systematically addressing the effects, opportunities for GHG mitigation can also be addressed, offering cost-effective opportunities at least cost.

## 2. Methods and approaches for assessing adaptation, adaptation co-benefits and resilience

Given the above context, the Philippines specifically proposes that a systematic approach to the analysis of the problem be applied, lending itself well to the quantification of climate risks to the agriculture sector. The results from the risk assessment process should then be used to formulate systematically, measures to: a.) avoid/prevent the risks<sup>2</sup>; b.) mitigate/reduce them if they cannot be avoided<sup>3</sup>; and c.) provide a means to ensure that the impacts of residual risks are also addressed<sup>4</sup>. Specifically, for the analysis, the Philippines proposes the use of the Probabilistic Risk

<sup>1</sup> The Philippine Department of Agriculture currently implements projects adopting climateresilient agriculture technologies, options, and good practices across the country with goal of mainstreaming and upscaling these initiatives in all areas.

<sup>&</sup>lt;sup>2</sup> Significant transformational sectoral changes like new, innovative agricultural systems and technologies, and new agricultural sites which are decoupled from climate hazards

<sup>&</sup>lt;sup>3</sup> Early warning, contingency planning, and re-engineering

<sup>&</sup>lt;sup>4</sup> Risk sharing/transfer mechanisms like insurance.

Analysis/Assessment (PRA) approach <sup>5</sup>, also strongly recommended by the Sendai Framework for Disaster Risk Reduction.

Where GHG mitigation measures have been employed, whether as a stand alone measure(s) or employed in tandem or part of the adaptation strategy such as the use of renewable energy for purposes of promoting sustainable and clean energy and/or fostering energy security for the agriculture sector, the GHG reduction and its contribution to the attainment of the eventual atmospheric temperature stabilization goal per the Paris Agreement must be duly assessed, in terms of its contribution to adaptation.<sup>6</sup>

As site-specific adaptation technologies and practices need to be *fit-for-purpose*, taking into account social, economic and environmental circumstances, support is needed by developing country Parties to build capacity and expertise and allocate resources to facilitate wider adoption, diffusion, and improvement of technologies.

On resilience, available literature especially in the context of quantification, simply means being "able to bounce back" to the pre-hazard event situation. A more "expansive" meaning and measurement of resilience can be resorted to once the basic adaptation measures and their costs have been figured out.

## 3. Improved soil carbon, soil health and soil fertility under grassland and cropland as well as integrated systems, including water management

Soil carbon, soil health and soil fertility measurements need more standardized quantification methodologies which the Philippines encourages to be developed and adopted. For this purpose, the Philippines encourages the establishment of more technology demonstration and learning sites across a variety and typology of environments and generation of more knowledge in order to provide more science- and evidence-based results.

<sup>6</sup> Primarily interpreted to mean avoidance/ reduction in losses from climate related hazards.

<sup>&</sup>lt;sup>5</sup> The Philippines, through its Climate Change Commission, recently issued CCC Resolution 2019-001, prescribing the PRA for planning and programming, generating systematically avoidance (prevention), mitigation and residual risk measures.