



# PATHWAYS TO ATTAINING A FOOD SECURE PHILIPPINES THROUGH A COMPETITIVE AND CLIMATE-RESILIENT AGRI-FISHERIES SECTOR

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In the Philippines, the effects of climate change are felt hardest by poor smallholder farmers and fisherfolk. To help alleviate their situation, the Department of Agriculture (DA) developed the Adaptation and Mitigation Initiative in Agriculture (AMIA) Program in 2014. Managed by the Systems-Wide Climate Change Office (SWCCO), the program identified, tested, and promoted climate resilient agriculture (CRA) technologies and approaches, with the ultimate goal of mainstreaming climate resilience within DA.

Almost six years into the program, SWCCO and DA Regional Field Offices (DA-RFOs) have drawn initial sets of lessons and insights from the AMIA villages established across the Philippines. In November 2019, as DA observes the Climate Change Consciousness

Week, SWCCO and the DA-RFOs are poised to bring understanding within the DA system the value of programming for resilience, the relevance of CRA, and the need for mainstreaming, scaling, and sustainability at local levels.

This document highlights the key messages drawn from climate adaptation efforts and events done with DA-RFOs across the country. This brief, developed for the Climate Change Consciousness Week, offers DA a synthesis of lessons from the AMIA village experience as a bankable model for establishing context-specific, local adaptation platforms for developing and disseminating CRA technologies and processes. This brief also offers valuable policy insights for the Philippines' National Adaptation Plan.

## 1

### Support local platforms for Climate Resilient Agriculture as foundations for resilient agriculture and fisheries

- Climate Resilient Agriculture (CRA) is the Department of Agriculture's approach to building climate resilient livelihood and communities.
- CRA a) increases agriculture productivity and income in a sustainable and environmentally-sound manner; b) builds the capacity of households and food systems to adapt to climate change; and c) reduces greenhouse gas emissions and increase carbon sequestration.
- DA implemented the Adaptation and Mitigation Initiative in Agriculture (AMIA) Program in 2014 to respond to the local challenges of climate change in the agriculture and fisheries communities. It was implemented in phases:
  - » AMIA 1 (2014) strengthened the capacity of DA to mainstream climate change adaptation at the strategic and operational levels. The National Color-Coded Agriculture Guide (NACCAG) Map was developed and launched in 2017 to inform the decision of farmers on crop management practices that are suitable and appropriate at a given location. The map shows naturally suitable areas for 20 priority crops and it also features eight climate hazards. (To access the map, go to <http://www.farmersguidemap.gov.ph>)
  - » AMIA 2 (2016) implemented and evaluated CRA technologies and practices in targeted areas.

Climate-risk vulnerability assessment was done to identify hazards in a given area and serve as basis for suitable CRA options.

- 21 AMIA Villages were established across the Philippines. These were selected based on level of climate risk vulnerability, the capacity of the community to adapt to climate change, and the capacity of the local institutions to provide support services.
- AMIA villages are lighthouses that serve as learning and dissemination sites of the most relevant CRA technologies and practices. Through this iteration of the learning process, the AMIA village concept and practices are brought to scale.

**2**

## **Pursue sustainable and competitive livelihoods while effectively managing climate and environment risks through promotion of adaptation strategies**

- DA and its partners have developed tools and methodologies that assess climate risk vulnerabilities. These can be readily used for objective programming at various levels of DA's banner programs. (For more information, visit [www.ciatph.github.io](http://www.ciatph.github.io))
- DA is implementing an extensive number of available, mature, and scalable CRA technologies and practices on the ground, with AMIA villages as models. (See [www.swcco.da.gov.ph](http://www.swcco.da.gov.ph))
- In promoting CRA technologies and practices, market potential and increase in income must be taken into consideration.
- Adaptation strategies facilitated on the ground: agricultural diversification; climate resilient crops; sustainable mechanization; enterprise development; climate information services; agricultural financial services; learning platform; farmers database; and soil and water management.

**3**

## **Review and re-orient existing DA programs to facilitate greater access of farming and fishing communities to adaptation strategies**

- Agriculture and Fisheries Modernization Plan (AFMP) realized: CRA is crucial to agriculture and fisheries modernization, which aims to increase the resilience of agri-fishery communities.
- Mainstreaming CRA: Climate resilience, sustainability, and productivity have to be integrated in regular DA programs, plans, operations, and investments. Competitiveness and profitability should link with resilience.
- Paradigm shift: Mainstreaming climate resilience in DA requires a paradigm shift that deviates from "business-as-usual" approaches. Lessons and evidences from the field must support top-down directives.
- Role of champions: Champions drive efforts to sustain and scale up adaptation work on the ground and establish linkages to policy and investments.

**4**

## **Empower women to take advantage of opportunities presented by Climate Resilient Agriculture**

- Climate change has differential effects on men and women that aggravate gender inequality. 35% of Filipinas involved in agriculture are unpaid (PIDS, 2018). Their plight are largely due to traditions and norms that limit their abilities and participation in agriculture.
- Gender disaggregated data, gender-sensitive data collection, monitoring and evaluation indicators,

and gender-equitable budgeting bring targeted attention to women in agriculture.

- An in-depth analysis of opportunities and constraints of women in accessing and controlling resources and services is needed to develop appropriate approaches and technologies that address gender-related issues.
- There are emerging agricultural technologies that are favorable to women. Examples of these are backyard gardening, small livestock production, weeder, transplanter, and seeder.

**5**

### **Increasing support for capacity building and local extension to harness potential of agri-fishery communities to adapt and innovate towards resilience building**

- Provide opportunities to capacitate agri-fishery communities in testing and innovating practices that enhance resilience and competitiveness.
- Improve local agricultural extension mechanisms for farmers and fisherfolk to utilize research outputs on Climate Resilient Agriculture.
- Consider the inherent adaptation mechanisms and traditional practices of farmers when promoting new technologies and practices.
- The Department of Agriculture's Agricultural Training Institute uses the Climate Resilience Field School Model to educate local extension workers, farmers, and fisherfolk how to practice resilient agricultural methods.

**6**

### **Maximize the unique opportunities presented by LGUs in delivering Climate Resilient Agriculture at the community level while fostering strategic local partnerships**

- The Department of Agriculture (DA) and Local Government Units (LGUs) have a shared responsibility of delivering agricultural services to farmers and fisherfolk.
- LGUs have unique capacities to mobilize human and financial resources to deliver CRA down to grassroots level. DA can formulate and operationalize national agriculture programs and projects, provide capacity building support, and develop platforms for LGUs to deliver this mandate.
- The AMIA village is a good model of a local platform for partnerships in pursuing climate resilience in agriculture and fisheries.

**7**

### **Capitalize on private sector contribution to sustain and scale out Climate Resilient Agriculture through enhanced services provision, financing, and value chain support**

- Sustaining CRA requires increased investments in infrastructure (i.e. irrigation, farm to market roads, marketing facilities), mechanization, local seed systems, agricultural credit, and crop insurance.
- CRA should be financially beneficial to agri-fishery communities in the long run by reducing production cost and enhancing the resilience of existing, well-established community value chains.
- The local private sector ensures that agri-fishery communities have assured supply of agricultural inputs and services, fair trade prices, better access to markets, and services to support CRA practices.

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For more information on the NAP-Ag Project, you may contact the FAO Country Office: [fao-ph@fao.org](mailto:fao-ph@fao.org).



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