



Republic of the Philippines  
**DEPARTMENT OF AGRICULTURE**  
Office of the Secretary  
Elliptical Road, Diliman, Quezon City

June 25, 2018

Memorandum Order  
No. 19  
Series of 2018

**SUBJECT: GENERAL GUIDELINES ON THE IMPLEMENTATION OF SMALL-SCALE IRRIGATION PROJECTS OF THE DEPARTMENT OF AGRICULTURE**

**I. COVERAGE OF THE GUIDELINES**

This Guidelines shall cover the implementation of all Small-Scale Irrigation Projects (SSIPs) under the Department of Agriculture (DA), including a) new construction; b) improvement; and c) rehabilitation of existing systems for all agricultural and fishery commodities.

**II. GENERAL POLICY GUIDELINES**

The BSWM shall provide the over-all direction on planning and implementation of SSIPs. The DA-Regional Field Offices (RFOs) shall undertake the implementation of SSIPs within their respective regions as listed in the approved CY 2014-2022 National SSIP Master Plan and per updated list per year.

All SSIPs can be availed by qualified beneficiaries and proponents. The National and Regional Research Centers of DA, Agricultural Demonstration Areas of Local Government Units (LGUs) and Research Centers of State Universities and Colleges (SUCs) are considered qualified beneficiaries.

**III. EXECUTION**

Roles and Responsibilities of Implementing Agencies

- A. The BSWM shall:
1. Lead the annual updating of SSIP Master Plan with RFOs;
  2. Provide technical assistance to RFOs, LGUs and Farmers' Association (e.g. SWISA) including capability building through conduct of specialized training courses for trainers;
  3. Monitor the planning and implementation of SSIPs by the RFOs; and
  4. Consolidate and prepare quarterly reports of DA-RFOs for submission to DA.
- B. DA-RFOs shall:
1. Update and review annual proposed SSIPs per regional Master Plan for submission to BSWM;
  2. Implement the approved and funded SSIPs;
  3. Provide technical assistance to LGUs and other concerned agencies/organizations (e.g. SWISA);
  4. Monitor the operations and maintenance of the existing SSIPs; and
  5. Submit periodic (quarterly) reports to BSWM during projects' implementation.

#### IV. SPECIFIC GUIDELINES

- A. **Small Water Impounding Project (SWIP)**– an earth-filled structure with a height of 5-15 meters constructed across narrow valleys or depression to create a reservoir that will harvest and store rainfall and runoff for immediate or future use.
1. Coverage Area
    - With a minimum service area of 15 hectares.
  2. Qualified Beneficiaries/ Proponent
    - Organized farmers (SWISA) or group of farmers with at least 15 members who are willing to be organized.
  3. Mandatory Requirements
    - Right of way agreement in the form of Deed of Sale, Deed of Donation, or Usufruct Agreement not less than 25 years, for reservoir area, dam site, canal, access road and other structures for new construction;
    - Topographic and engineering maps; and
    - Engineering plans and detailed design, quantity take off estimates, and program of work to be signed and sealed by Licensed Agricultural Engineer per RA 8559 also known as Agricultural Engineering Act of 1998.
- B. **Diversion Dam (DD)/ Check Dam (CD)** – a concrete or rock fill structure with a height of 0.50 - 3.0 meters designed to divert portion of stream flow to point of use.
1. Coverage Area
    - With a minimum service area of 15 hectares
  2. Qualified Beneficiaries/ Proponent
    - Organized farmers (SWISA) or group of farmers with at least 15 members who are willing to be organized.
  3. Mandatory Requirement
    - Right of way agreement in the form of Deed of Sale, Deed of Donation, or Usufruct Agreement not less than 25 years, for canal and access road and other structures for new construction;
    - Topographic and engineering maps; and
    - Engineering plans and detailed design, quantity take off estimates, and program of work to be signed and sealed by Licensed Agricultural Engineer per RA 8559 also known as Agricultural Engineering Act of 1998.
- C. **Small Farm Reservoir (SFR)** – impounding and storage facility with concrete or plastic as lining and protection of embankment. These are used to collect rainfall and run-off for immediate and future agricultural use.
1. Coverage Area
    - With a minimum production area of 0.5 hectare per unit
  2. Qualified Beneficiaries/Proponent
    - Individual farmer with a minimum of 0.5 hectare production area;
    - For group of farmers with a minimum of 2.5 ha production area and have a common site for SFR, they may be provided with aggregate SFR equivalent to 5 units.
    - National and Regional Research Centers of DA and SUCs and research and demonstration farms of LGUs.

D. **Shallow Tube Well (STW)** – consists of a tube or pipe vertically set into the ground at a depth of 6 to 20 meters with pipe diameter of 50 mm, 75 mm or 100 mm, designed to lift water from shallow aquifer for irrigation using pump and prime movers (e.g. electric, diesel or gasoline).

1. Coverage Area
  - With 1.0 to 3.0 hectares production area within the shallow groundwater.
2. Qualified Beneficiaries/Proponent
  - Group of 3-5 farmers with minimum 3.0 hectares irrigable area;
  - Farmer Associations, Cooperatives, and other related organizations; and
  - Individual farmer with at least 1.0 to 3.0 hectares irrigable area

E. **Pump Irrigation System for Open Source (PISOS)** – consists of pump and prime mover (e.g. electric, diesel or gasoline), suction and discharge pipes to lift water from surface waters to deliver water to point of use.

1. Coverage Area
  - With at least 1.0 to 3.0 hectares production area
  - With dependable surface water sources such as rivers and lakes.
2. Qualified Beneficiaries/Proponent
  - Group of 3-5 farmers with minimum 3.0 hectares production area;
  - Farmer Associations, Cooperatives and other related organizations;
  - Individual farmer with at least 1.0 to 3.0 hectares production area.

F. **Spring Development** – consists of concrete storage tank or intake structure, and Polyethylene (PE) pipes or concrete canals for distribution by gravity.

1. Coverage Area
  - With a minimum 1.0 hectare production area
2. Qualified Beneficiaries/Proponent
  - Group of at least 3 farmers with a minimum 3.0 hectares production area

G. **Alternative Prime Movers for Pump Irrigation Systems**- these consists of pump and prime movers using renewable energy sources, storage tanks and piped distribution systems. In these systems, the water sources are already developed (e.g. river, lakes, and wells) that require energy to lift water to point of use.

These systems include **Hydraulic ram pump, Wind pump, and Solar pump**. The Solar pump however has a separate Guidelines being the Flagship Program of the DA.

1. Coverage Area
  - With a minimum 3.0 hectares production area for high value crops;
  - With existing dependable water source (wells); and
  - With potential water source for development (shallow and deep wells, dug well)
2. Qualified Beneficiaries/Proponent
  - At least 3 farmers with minimum 3.0 hectares irrigable area; and
  - Research Centers of DA, LGUs and SUCs

## **V. RESPONSIBILITIES OF FARMER-BENEFICIARIES/PROJECT RECIPIENTS**

The projects' recipients shall have the following responsibilities:

1. Provide counterpart fund in excess of the maximum government support in the case of pump irrigation systems (STW and PISOS);
2. Learn the basic trouble-shooting and maintenance of their SSIPs especially pumpsets and continuously capacitate themselves through trainings to be provided by the DA and other agencies; and
3. Shoulder the costs for operation and maintenance and repair, except in the event of *force majeure*.

## **VI. COST STANDARD PER TYPE OF SSIP**

The maximum development cost or subsidy per type of SSIP is attached as Annex A. These costs refer to the project's total construction cost.

## **VII. LAND ACQUISITION COST FOR AFFECTED AREAS**

One of the pressing issues encountered by the RFOs that hindered smooth implementation of SSIPs particularly SWIP is the "Right-of-Way" problem despite having signed a Memorandum of Agreement by the affected landowners and farmer-beneficiaries. To resolve this, cost of the affected lands shall be included in the total project cost in accordance with the provisions embodied in RA No. 10752 OF 2016, otherwise known as "The Right-of-Way Act".

This cost shall be included in the proposed projects for CY 2018 onwards. To ensure timeliness of the review proposals by BSWM and CAFED, and submission to National Banner Programs and DBM, the Detailed Engineering Design (DED) and Program of Work (POW) must be prepared during the 4<sup>th</sup> quarter of the current year. Take note that the SSIP proposals are submitted a year ahead of the date of implementation. For instance, the CY 2018 proposals' DED and POW have to be prepared this 4<sup>th</sup> quarter of 2016 to be reviewed by BSWM and CAFED during the 1<sup>st</sup> quarter of 2017 prior to submission to National Banner Program then to DBM.

The extent of affected areas shall be determined upon finalization of plans and design and parcellary map shall be prepared for the affected areas. This will be included in the review of BSWM.

A separate Guidelines or Procedural Manual will be developed for this in harmony with the schemes of other government agencies such as DENR, DAR and DPWH.

## **VIII. COST OF ENVIRONMENTAL COMPLIANCE CERTIFICATE (ECC)**

In case the proposed SWIP belongs to the DENR's coverage for ECC, the cost of preparation and submission of required documents to DENR shall be shouldered by the respective RFO. Unless ECC is issued, implementation of the project could not commence.

## **IX. ADMINISTRATIVE COST**

This cost is estimated at 5% of the total project cost.

- X. The RFOs are allowed to out-source the preparation of DED and POW including the conduct of topographic and other surveys; and the preparation of documents required for the issuance of ECC.
- XI. No proposal shall be recommended for funding to the National Banner Programs unless reviewed by BSWM and CAFED. The BSWM shall review the submitted proposals based on the following criteria:
- Included in the Master Plan or updated lists
  - With complete DED and POW
  - Compliance with cost standard
  - Complete documents relative to land acquisition for SWIP and DD
  - Complete documents relative to issuance of ECC (if applicable)

**XII. SUPPLEMENTAL GUIDELINES**

1. All DA-RFOs and DAF-ARMM are hereby authorized to formulate detailed supplemental guidelines to address peculiar situations of a particular region or to clarify further those indicated in the Memorandum Order. A copy of all regional issuance for supplemental guidelines shall be officially furnished to the BSWM and Banner Programs Secretariat within seven (7) working days from the date of its release.
2. The DA Secretary may authorize the DA-RFOs to adopt and implement other modalities or schemes in the implementation of SSIPs.

**XIII. RESOLUTION OF ISSUES UNDER THIS IMPLEMENTING GUIDELINES**

All issues and concerns pertaining to these implementing guidelines shall be forwarded to the Office of the BSWM Director for appropriate and immediate action.

**XIV. EFFECTIVITY**

This General Guidelines shall take effect immediately and shall repeal all issuances inconsistent herewith.

APPROVED:

**EMMANUEL F. PIÑOL**  
Secretary  
Department of Agriculture

**ANNEX A**  
**COST STANDARDS PER TYPE OF SSIP**

**A. SMALL WATER IMPOUNDING PROJECT**

- Maximum development cost of PhP 300,000 per ha of service area for new construction
- Maximum development cost of PhP 200,000 per ha of restored area for rehabilitation or improvement

**B. DIVERSION DAM**

- Maximum development cost of PhP 200,000 per ha of service area for new construction
- Maximum development cost of PhP 100,000 per ha of restored area for rehabilitation or improvement

**C. SMALL FARM RESERVOIR**

- Maximum subsidy of PhP 100,000 per unit and PhP 500,000 for aggregate of 5 units for new construction
- Maximum subsidy of PhP 50,000 per unit and PhP 250,000 for aggregate of 5 units for rehabilitation

**D. SHALLOW TUBEWELL**

- Total cost of the project (pumpsets and tubewell) ranges from PhP 50,000 to PhP 150,000.

**E. PUMP IRRIGATION FOR OPEN SOURCE**

- Total cost of the project (pumpsets and suction pipes) ranges from PhP 50,000 to PhP 150,000

**F. SPRING DEVELOPMENT**

- Maximum development cost of PhP 200,000 per ha of service area

**G. ALTERNATIVE PRIME MOVERS FOR PUMP IRRIGATION FOR HIGH VALUE CROPS**

- Maximum subsidy of PhP 650,000.00 per system for ram pump irrigation system
- Maximum subsidy of PhP 550,000 per system for wind pump irrigation system