Republika ng Pilipinas
Department of Agriculture
Pambansang Pangasiwaan ng Patubig
(NATIONAL IRRIGATION ADMINISTRATION)
Lungsod ng Quezon

LABANAN ANG KAHIRAPAN

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M.C. No.: 27, s. 2010

MEMORANDUM CIRCULAR

TO : THE SENIOR DEPUTY ADMINISTRATOR, DEPUTY ADMINISTRATORS, DEPARTMENT MANAGERS, REGIONAL IRRIGATION / OPERATIONS / PROJECT MANAGERS, DIVISION MANAGERS, AND ALL OTHERS CONCERNED

SUBJECT : IRRIGATION DEVELOPMENT THRUSTS (IDT) AND CORRESPONDING MONITORING AND EVALUATION (M&E) SYSTEM

Achieving rice self-sufficiency and reducing rural poverty incidence are the main objectives stated for the Rice Master Plan (RMP) 2009-2013. Irrigation development, in consideration of its huge contribution to increasing harvested area, is among the strategies assembled thereon. In support to the RMP, we envisage as we did in the past to increase area serviceable and irrigated, cropping intensity and crop yield.

Executing irrigation construction and rehabilitation projects, and promoting ingenious farming systems and cropping patterns are our interventions. These are shown in the attached "Irrigation Development Thrusts (IDT) for CY-2009", useful as reference for field-level planning and assessment. When requested by field offices, the Operations Department (OD) should provide orientation briefings on the mechanics of the interventions.

OD shall prepare the overall IDT for CY-2010 this April, which should encompass crop year 2010 covering the period May 2010 to April 2011. Considering standard practice, crop-1 2010 should cover May 2010-October 2010 and crop-2 2010 should cover November 2010-April 2011. Henceforth, we should adopt crop-1 which starts in May as basis in developing other cropping patterns, e.g., rice-rice-rice and rice-ratoon-rice-ratoon.

Irrigation Management Offices (IMOs) and Regional Irrigation Management Offices (RIOs) should prepare their respective annual IDT. As bases for monitoring and evaluation (M&E), these IDTs should show brief description and specific targets of the interventions chosen. For example, IDTs should show the cropping rhomboids for, say, a rice-rice-rice cropping pattern with the target area for each cropping indicated.

IMOs and RIOs shall submit their annual IDTs by the end of May via email to nia-od@yahoo.com for compilation and M&E action. OD shall present feedback on compliance to this MC and on the contents of the IDTs received during the Irrigation Managers' Conference in June or July. Firmed-up serviceable area (FUSA) as basis in setting specific targets (e.g., cropping intensity) should come from the System Management Division (SMD).

Preparation of annual irrigation performance commitments and accomplishments should henceforth use the IDTs as one of the bases. OD shall prepare the required data capture forms for the M&E action by making necessary improvement of the existing system O&M report forms. IMOs and RIOs shall accomplish these forms by setting commitments and reporting accomplishments using fixed reckoning parameters.

We enjoin your compliance.

ALEXANDER A. REUYAN
Officer-In-Charge, Office of the Administrator

Attached: as stated

bsl/gsd/…

Date: 14 April 2010

Republika ng Pilipinas
Kagawaran ng Pagsasaka
Pambansang Pangasiwaan ng Patubig
(National Irrigation Administration)
Diliman, Quezon City

08 April 2009

Irrigation Development Thrusts for CY2009

Backdrop Situation

Increasing harvested area and rice production to inch closer to rice self-sufficiency are the current national thrusts. As shown in the Rice Master Plan (RMP) 2009-2013, these national thrusts call for customary program interventions. Executed along this line, as in the past, are interventions that tend to increase area serviceable, cropping intensity and crop yield.

RMP 2009-2013 envisages, as the fundamental approach, rice self-sufficiency as the priority program by province. It thus assigns the rice self-sufficiency program to local government units (LGUs) in the municipal and provincial levels. Irrigation development programs for each province thus should take cognizance of the overall NIA thrusts herein spelled out.

Program Thrusts

NIA implements irrigation construction projects to generate additional area serviceable, which are open to multiple cropping. It targets to upgrade dilapidated irrigation systems and enforce enhanced cropping patterns to increase cropping intensity. It promotes ingenious farming systems and envisages improved irrigation service to improve crop yield.

(a) Expanding Area Serviceable

Irrigation development in the country is now 49 percent, with 1.520M ha irrigated of the 3.126 M-ha irrigable area. Of the irrigated area, 0.749M ha is in national systems, 0.554M ha in communal systems and 0.217M ha in private systems. At such development level, local rice shortage yet recurs—compelling reason for Government to exert more efforts.

NIA is now more buoyant than ever at reaching targets on its task-share of inching closer to rice self-sufficiency. Irrigation development now has heightened emphasis, ascribed to reaching rice self-sufficiency and reducing poverty incidence. Funding allocation has leaped to unprecedented levels, focused at irrigation construction and rehabilitation projects.

NIA has 32 ongoing projects—7 foreign-assisted and 25 GOP-funded with a funding requirement of ₱ 12.61 B for 2009. These will generate 18,012 ha of new area, rehabilitate 35,117 ha of existing area and restore 100,050 ha of inactive area. NIA observes balanced serviceable area expansion (BSAE) among the regions in subproject prioritization.

(b) Modernizing Irrigation Systems

Expanding irrigated area and cropping intensity is achievable through modernization-based system upgrading (MBSU). MBSU improves water availability, conveying capacity, water regulation and operating capability in the systems. Canal structures take over much of water control—a significant reduction in the customary tasks of irrigation stewards.

Under the customary irrigation rehabilitation scheme, achieved improvement in irrigation performance is just nominal. MBSU is an improved scheme developed out of the need to restore system functionality and improve system performance. Envisaged benefits in terms of water dependability, area restoration and operations simplicity are more achievable.

(c) Enriching Cropping Pattern

To further increase cropping intensity, NIA shifted from rice-rice cropping patter (R^2CP) to rice-rice-rice cropping pattern (R^3CP). Under R^3CP, seed sowing should happen in the week before harvesting and transplanting in week-3 after harvesting. This quick turnaround response is the key to achieving R^3CP of early maturing varieties a year per landholding.

Uniform farm activities and crop stages, in every turnout service area (TSA), makes crop protection and water management efficient. Terminal irrigation also can take place without any late-growing crop that may be subject to water stress. This calls for dividing serviceable areas into five blocks and assigning each block to each week of the five-week leadtime.

NIA targets to increase cropping intensity from 135 percent to above 170 percent through various interventions. It is carrying out a crash program on technical orientation of system stewards about the strategy in achieving R^3CP. This will ensure keen familiarity on the essentials of cropping calendar, rhomboid and pattern—necessary in R^3CP adoption.

(d) Enhancing Field Irrigation

NIA endorses enhanced intermittent field irrigation (EIFI) to cut water use (by 25%) and improve water adequacy. EIFI, a component of an ingenious farming system, dwells on alternate wetting and drying (with slight cracking) of rice fields. It stimulates soil aeration, resulting in enhanced soil biota, enlarged root system, and rejuvenated soil functions.

EIFI execution should skip the tillering and booting stages, to avoid hurting the crop with yield-reducing consequences. It fits well in TSAs where near simultaneous crop stages exist—a condition stressed needed under R^3CP. A typical EIFI plan involves a 3- to 4-day "on" and 6- to 8-day "off" irrigation delivery cycle—dependent on field condition.

(e) Improving Farming System

NIA promotes adoption of an ingenious farming system, dubbed sustainable system of irrigated agriculture (SSIA). An organic-based package, SSIA has big potential of increasing crop yields at reduced water input and production cost. It rejuvenates deteriorated farm soils and produces chemical-free output (palay) that commands higher prices.

SSIA involves planting of *dapog*-raised 8- to 12-day old seedlings at 40-cm x 40-cm spacing in two-way straight rows. It also involves subjecting the field to EII to achieve soil aeration

and two rounds of weeding using spike-teeth rotary weeders. Further, it involves spreading 40 bag/ha organic fertilizer during land preparation and spraying of organic pesticide.

NIA uses a video CD on SSIA as a Philippine variant of SRI (system of rice intensification) in its promotional efforts. This instructional material is the output of a technology documentation program by the World Bank Institute (WBI). NIA likewise continues to establish demo-farms on SSIA as learning and promotional sites of the technology.

Success Indicators

In summary, NIA has five main interventions relative to the national thrust of inching close to rice self-sufficiency (Fig. 1). Besides irrigation construction, NIA promotes MBSU, EIFI, R^3CP and SSIA to increase cropping intensity and crop yield. These dwell at improving irrigation functionality and performance with improving operating capability also aimed.

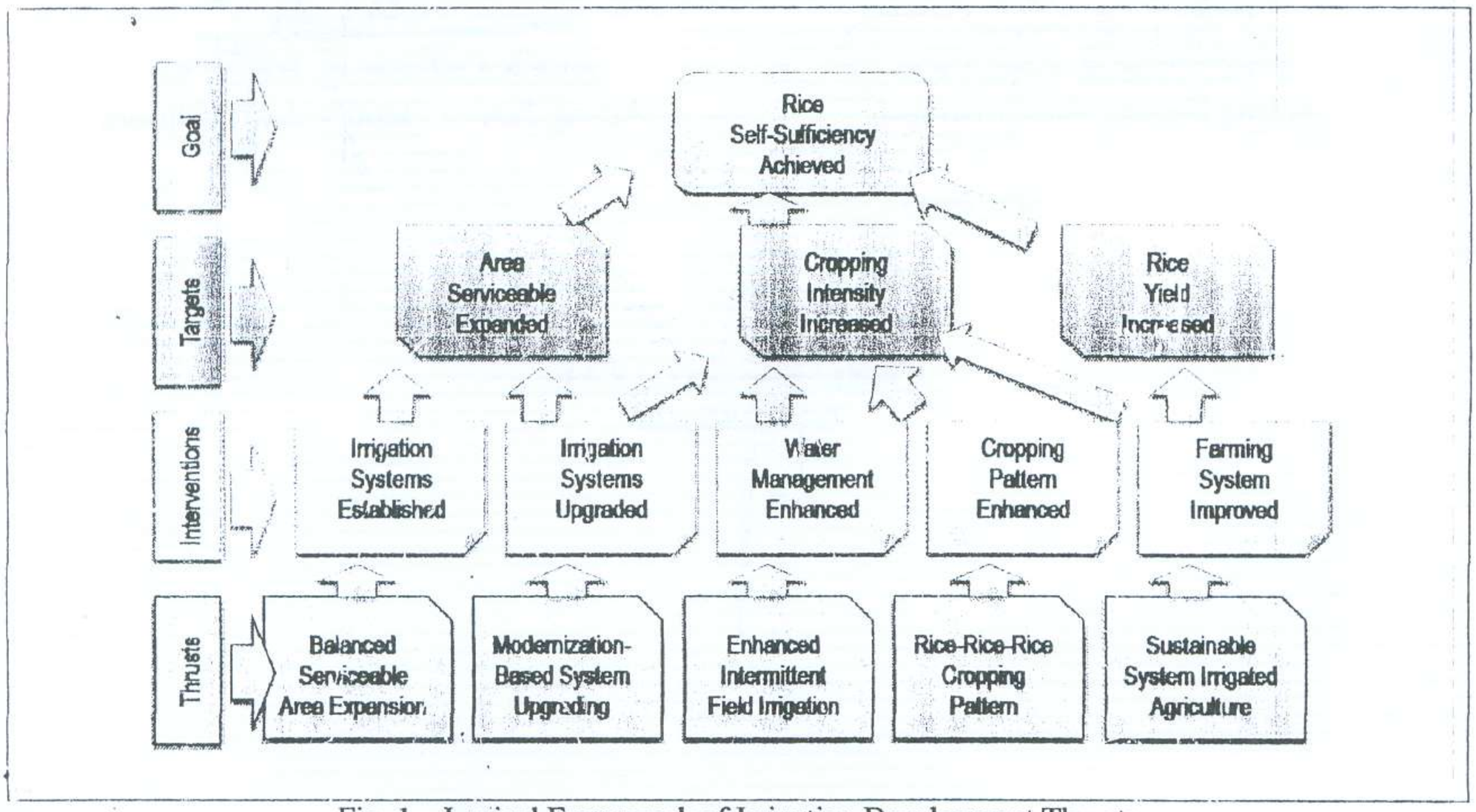

Fig. 1 – Logical Framework of Irrigation Development Thrusts

(a) *Generated Area (GA)* – GA refers to the hectarage generated by the irrigation construction and rehabilitation projects completed within the year. **Target GA = <u>18,012 ha</u>** (Achieved incremental GA was 15,037 ha in 2007 and 13,481 ha in 2008.)

(b) *Cropping Intensity (CI)* – CI refers to the achieved cumulative area harvested within a year as a percentage of the absolute area serviceable. **Target CI = <u>174 %.</u>** (Achieved CI was 154 % in 2007 and 167 % in 2008.)

(c) *Rice Yield (RY)* – RY refers to the achieved rice production (in metric ton, mt) per unit area (in hectare) every harvest within irrigated areas. **Target RY = <u>4.30 mt/ha</u>.** (Achieved RY was 4.13 mt/ha in 2007 and 4.25 mt/ha in 2008.)

Follow-Up Actions

NIA accords emphasis on increasing cropping intensity and rice yield because such impacts greatest on farmers' income. Field offices thus should embark on all thrusts deemed advantageous to achieve dramatic increases in such parameters. There exists no better NIA legacy than being successful in increasing serviceable area, cropping intensity and rice yield.

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