

4. COUNTRY REPORT OF THE PHILIPPINES

Sebastian I. JULIAN*

Introduction

The Philippines is composed of 7107 islands with complex physiographic and climatic patterns, with a total land area of 116,220 square miles.

With its many mountain ranges, it has 408 river basins with drainage area ranging from 40 to 25,000 square kilometers. The country is under the influence of the monsoon and along the path of tropical typhoons; with rainfall varying in intensity on a regional basis. Its temperature favors the growing of crops (and livestock) on a year-round basis.

The major goals of the Philippine government are self-sufficiency in foods particularly rice and corn, expansion of agricultural exports, intensification of the agrarian reform program, and distribution and conservation of natural resources. These goals however, could only be attained through the intensified efforts to develop its water resources, as a key factor for irrigated agriculture development, considered as the base of the Philippine economic take-off.

Irrigation plays a crucial role in the total economic development efforts of the Philippines.

The Situation

The issuance of Presidential Decree No. 552, amending Republic Act No. 3601 creating the National Irrigation Administration (NIA) gave new thrusts...to the attainment of the Irrigation Age, which is highly relevant to the development efforts of the country, which requires a long time horizon of more than 10 years.

The country has 115 national irrigation systems with a combined potential area of 443,778 hectares, and 1,072 small communal irrigation systems with irrigable areas of 200,188 hectares. Areas irrigated by other means such as pumps and other private systems would make the total hectarage close to more than one (1) million hectares.

Forty (40) per cent of the service area are being irrigated during the dry season for national and communal irrigation systems; and 60 per cent for pump systems, with an average yield of 55 cavans (2.22 tons) per hectare.

In projects with reservoirs like the Angat River Irrigation System, the Upper Pampanga River Project (UPRP) and the up-coming Jalaur and Upper Magat Multi-purpose; and groundwater projects, an average yield of 70 cavans (3.5 tons) per hectare seems to be attainable due to assured water supply with 2 crops per year; or an increase of 110 cavans per hectare per year in new areas, and about 63 cavans in improved areas.

Upon completion of the Angat-Magat Integrated Agricultural Development Projects, an average of 85 cavans (4.25 tons) per hectare is expected, or an increase of 60 cavans per hectare per year.

* Chief, Research and Development Division, Operations Department, National Irrigation Administration, Republic of the Philippines.

The Ten-Year Irrigation Development Program

Under the 10-year irrigation development program the NIA will establish irrigation projects by using an integrated agricultural area development approach to supersede the limited activity of constructing a system simply to make irrigation available to the area. The NIA, in addition to the construction of the dam, would include adequate farmditches, drainage facilities, farm-to-market roads; and would (indirectly) engage in farmers' training in the use of water and in related agricultural practices, organization of farmers to irrigators' associations/cooperatives, which are necessary to fully realized the benefits of irrigation.

Under the able leadership of His Excellency President Ferdinand E. Marcos, it is expected that the intensified irrigation development program can reduce the 8 per cent deficiency in rice production to 3 per cent in 1976; with an expected surplus for 1977 and the years thereafter.

The 10-year program envisioned to place under irrigation 1.35 million hectares, which in addition to the 1 million hectares would bring the total absolute area to 2.35 million hectares by 1985. With adequate water supply, crop diversification would be made possible, thus increasing cropping intensities; and possibly income of farmers in irrigated areas.

As scheduled in the 10-year Irrigation Development Program, 1,347,900 hectares will be generated (as new areas) and 342,700 hectares will be improved in existing irrigation systems. This will have a "*much-telling-effect*" on the economy of the country, which is primarily agricultural.

To maintain a *pipeline* of feasible projects, increased funding requirements for feasibility studies, investigations, surveys, designs and plans preparation will entail P6 million annually for the Central Office, regional and provincial offices of the NIA. This is a gigantic task that requires a missionary zeal for service on the part of our irrigation personnel.

Development of Farmers' Owned Irrigation Systems

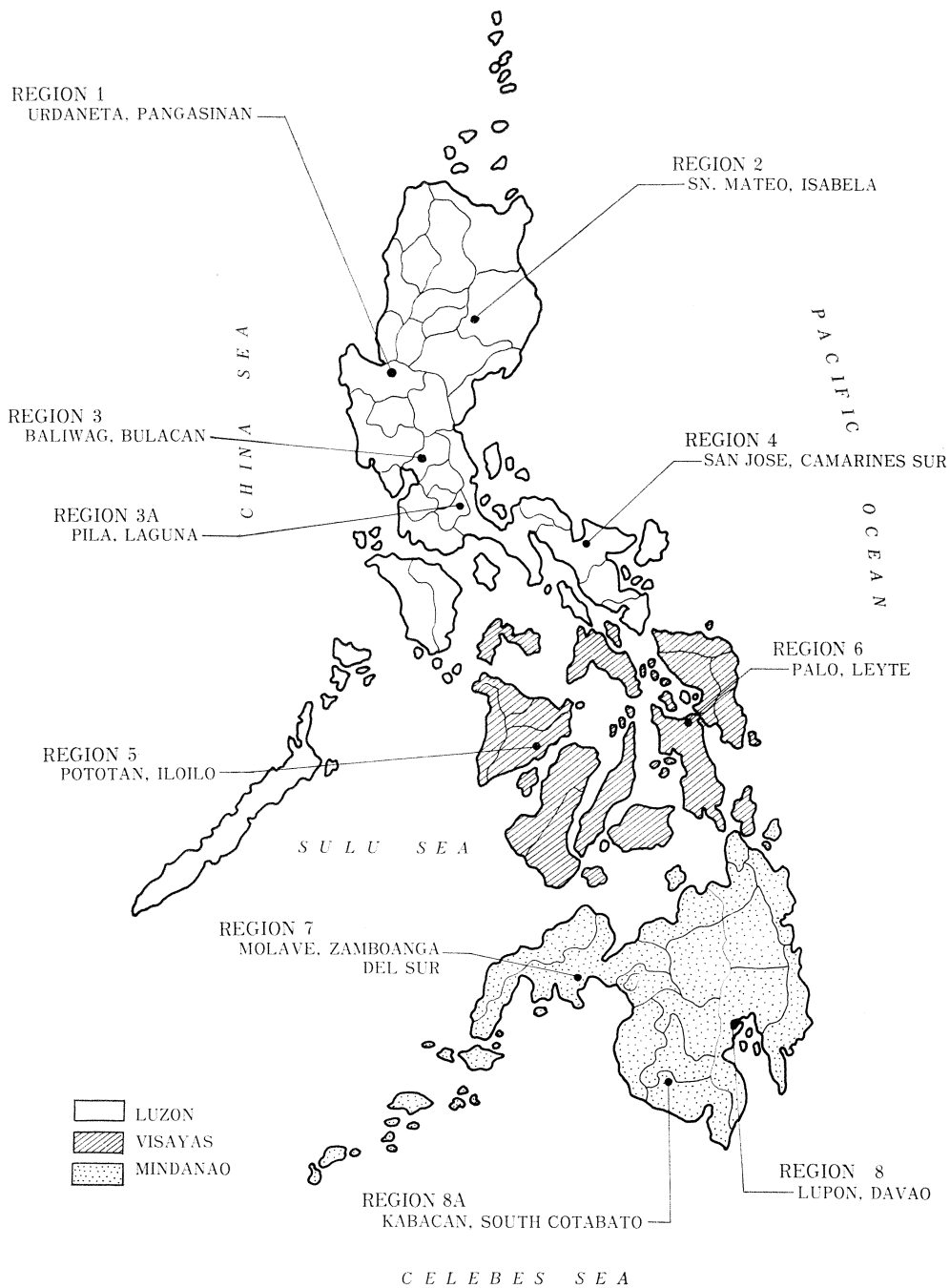
Due to the expanding population, irrigation development in the Philippines is given a top priority among the various infrastructures programmed for construction. To give more impetus to irrigation, Presidential Decree No. 552, aimed for "a comprehensive development, utilization and conservation of water resources of the Philippines . . . and to effectuate an economic means of achieving the optimal and diversified utilization and control of water by undertaking integrated irrigation projects".

The Decree provides broader powers and authority for "the NIA to undertake concomitant projects such as flood control drainage, land reclamation, hydraulic power development, domestic water supply, road or highway construction, reforestation and projects to maintain ecological balance", in coordination with other agencies of the Republic of the Philippines.

To provide an ideal climate for the promotion of Irrigation Associations/Cooperatives for the development of small farmers, the government through the NIA, will "delegate the partial or full management of national irrigation systems to duly organized cooperatives or associations, under such terms and conditions the NIA Board of Directors may impose.

In support of the objective to develop the small farmer to accelerate irrigated agriculture development, NIA Memorandum Circular No. 10 has two (2) meaningful objectives, as follows:

1. To implement the irrigation development program, increased attention was given on the construction of small gravity and pump irrigation projects to accelerate generating irrigated areas.



Map Showing the 10 NIA Regional Research and Development Stations in the Philippines

2. To undertake the organization of viable and responsible irrigators' associations/cooperatives which may assist in the construction of irrigation projects, and to be developed by the NIA to undertake the management, operation and maintenance of irrigation projects/systems, or upon the return to the associations/cooperatives of the management of irrigation system. . .

To demonstrate the seriousness of the Government to develop irrigation systems through the active participation of the small farmers, the President signed Presidential Decree No. 681, creating the Farm Systems' Development Corporation (FSDC) . . . to provide substantial opportunities to Filipino Farmer to attain economic well-being and lead a dignified life. "The government, shall pool the collective efforts of the public and private sectors in order to effect the necessary changes and reforms in the social, economic and political structures" of the New Society, through irrigated agriculture development.

Literature Cited

1. Annual Reports of the National Irrigation Administration, 1973-74.
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4. Republic Act No. 3601.
5. Memorandum Circular No. 10 (NIA) Series of 1975.
6. Status Report of Irrigation Development of NIA Administrator to the President of the Philippines, September 11, 1973.
7. Country Statement Philippines to the Sixth Session of FAO Farm Management Commission For Asia and the Far East, Manila. 28 April to 6 May 1975.