

PREFACE

The 80:20 pond fish production system technology was developed for China by the authors working with the American Soybean Association (ASA) in cooperation with various agencies of the Chinese national and provincial governments and with farmers throughout China. Development of the technology began in 1992 with a series of field trials based on earlier feed trials designed and conducted in China by Dr. Dean Akiyama (formerly of ASA). Full extension of the technology was initiated in 1995 by the China National Fisheries Extension Center (NEC), the Bureau of Fisheries, the Ministry of Agriculture and technical support was provided by the ASA. The 80:20 technology is now the only pond technology promoted and financially supported by the NEC.

Development in China of 80:20 or similar feed-based technology was inevitably going to occur within a few years. Fish farming in China was in an early stage of revolution when Akiyama began trials in the late 1980s. Traditional manure-based polyculture system, for which China was world renowned, had become only marginally profitable and was environmentally degrading. Farmers and government authorities were already trying new ideas and had begun using feeds as early as 1985. Nutritionally complete aquafeeds were essentially non-existent in the early 1990s, but had grown to approximately 5 million metric ton (mmt) by 1996, making China the world leader in aquafeed production by volume.

The ASA has now gathered more than ten years of experience with demonstrations and feeding trials in China., Based on these very successful experiences, a new program was initiated in India and Southeast Asia in 2003, called the Soy-In-Aquaculture program. Working with local farmers, feed mills, and universities, the 80:20 technologies developed in China are being introduced into these regions.

India and Southeast Asia have strong and growing aquaculture industries. The four target nations of the Soy-In-Aquaculture program - India, Indonesia, Vietnam, and the Philippines - all rank in the top ten of the aquaculture producing countries in the world with over 4.6 mmt of production annually. The American Soybean Association recognizes the region's growing aquaculture industry and the opportunities to aid farmers and feedmills with advanced technologies.

The Soy-In-Aquaculture program aims to realize similar outcomes as the 80:20 program has demonstrated in China. The program focuses on the acceleration of the adoption of more profitable and environmentally sound technology and the associated growth of the aquafeed industry in India and Southeast Asia.

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international market development have supported training, feed development and testing, and demonstration of 80:20 pond production technologies in China, as well as the preparation and publication of this manual.