

Aromatic Hybrid Rice of America (AHRA)

A business model that aligns international development with hybrid rice production for U.S consumption and export, research partnership, and multi-party collaboration in agriculture

http://www.knowledgebank.iri.org/ricebreedingcourse/Hybrid_Rice_Breeding_&_Seed_Production.htm



Global Green Technologies Corporation

<https://globalgreentechcorp.com>



AROMATIC HYBRID RICE OF AMERICA (AHRA)

CONTENTS

Executive Summary
Company Overview
Market and Industry Analysis
Principal Products and Services
Marketing Plan
Management Plan
Operational Plan
Development Plan
Financial Plan
Competitive Advantage
Funding Plan
Conclusion

Annex

Financial Projection Tables
Aromatic Hybrid Rice Development Team



EXECUTIVE SUMMARY

In the U.S., rice is a crop grown in the Grand Prairie of Arkansas, the Mississippi Delta parts of Arkansas, Mississippi, Missouri, and Louisiana, the Gulf Coast of Texas and Southern Louisiana, and the Sacramento Valley of California. Rice is produced in these regions both for domestic consumption and export. Each of these regions normally specializes in a specific type of rice referred to in the U.S. by the length of grain as long, medium, and short.

According to the U.S. Department of Agriculture (USDA), U.S. rice imports have trended up sharply over the past 20 years. Aromatic varieties from Asia, the Jasmine from Thailand and Basmati from India and Pakistan, are being imported. The average importation is 14 percent of the supply and reached 25 percent in 2019-2020. The current rice importation is one million metric tons.

The present rice importation trend is alarming considering that the U.S. is a traditional rice exporter. The U.S. is a consistent timely supplier of high-quality rice in both the long and combined medium-and short-grain markets. While the U.S. accounts for less than two percent of global rice production, it ships around six percent of global exports and is currently the fifth-largest exporter. Overall, the U.S. exports half of its rice crop each year. Exports are thus important to its rice industry, with 45-50 percent of the crop exported each year.

The U.S. rice exports have been stagnant in recent years. On this basis, this trend needs to be addressed with practical operating strategies. One approach for consideration is realignment towards the increasing popularity of aromatic rice internationally. Furthermore, if aromatic rice, combined with the hybrid rice technology, transforms into a significant brand of the U.S. rice export product, the country possesses a competitive advantage in terms of supplying rice of superior grains quality in large volume and in timely delivery. The U.S. has adequate land areas and production, processing, marketing, and research and development infrastructure for exporting rice that can match those aromatic rice products from Thailand and India. Aromatic rice certainly contributes to improving the inferior eating quality of the traditional U.S. long-grain rice.

On the genetic level, hybrid and inbred rice varieties are entirely different. Hybrid rice is created by fertilizing the female organs of one plant with the male pollen of a separate and genetically different plant. The resulting seed is harvested as a uniform first-generation F1 hybrid seed containing half of its genetic material from each parent. Hybrid rice seed production requires a more precise system and the seed used for planting has a yield advantage of 20 percent.

Based on the opportunities derived from the hybrid rice technology and the need to address the threats to the U.S. rice export by the aggressive marketing of aromatic rice from Asia, the Aromatic Hybrid Rice of America (AHRA) is a viable and timely project. The primary business of the enterprise is the integrated commercial production, processing, and marketing of aromatic hybrid rice with dedicated seed production facilities and a procurement fund under a contract production arrangement with rice farmers who will grow aromatic hybrid rice.

The objectives of AHRA as an integrated business enterprise are: a) to establish the AHRA as a company engaged in integrated hybrid rice production, processing, and trading business in the four major rice-growing regions in the U.S. namely Arkansas, Louisiana, Texas, and California; b) to establish the hybrid rice seed production farms that will be involved in the multiplication of parental breeding materials and the F1 hybrid seed that will initially use the hybrid rice varieties released by public breeding institutions, c) to engage in the contract production of aromatic hybrid rice involving farmer cooperators with an aggregate area of 15,000 acres per production cluster or a total of 60,000 acres per growing region of the



U.S.; and d) to market branded aromatic rice using hybrid varieties both for domestic and international markets

The AHRA integrated hybrid rice business operations shall establish its own system of hybrid rice seed production and parental materials maintenance to ensure that farmers receive high-quality hybrid rice seeds for planting. The AHRA hybrid rice seed business unit, which is the foundation of the enterprise, shall commercialize its own system based on technologies developed in China, India, the Philippines (The International Rice Research Institute), and the U.S. A contract production arrangement with farmers requires an integrated hybrid rice seed and contract production and marketing system. Partners include farmers, cooperatives, and landowners. The farmer cooperators are first assured of the supply of quality seeds of hybrid rice. Support services, which include technology transfer and marketing, are vital components of the contract production package. Through organized production, farmers enter production arrangements with AHRA.

AHRA sets its target area covered under the aromatic hybrid rice production program at 60,000 acres per rice-growing region. The target is ideal for better efficiency in terms of production and marketing. In every region, the target starts at 15,000 acres and increases by 15,000 acres in the succeeding year, and an additional 30,000 acres in the third year for a total of 60,000 acres. The aggregate target area in the four states is 240,000 acres.

The initial investment cost in the first year of the project per region is US\$ 8,994,430 or a total of \$US 35,977,720 for the operations in the four regions. The investment is for seed farm establishment, the establishment of the contract production operations, the creation of market niche, and product marketing research and initial promotion. The incremental requirement to meet the desired capital in the second year for the entire operations in four regions is 88,704,000 \$US in the four regions. This funding requirement will be for the procurement of aromatic hybrid rice for milling and marketing. The total investment required to be released in four tranches is US\$ 302,089,720.

The main profit centers of the integrated hybrid rice business are the hybrid rice seeds sale and the branded aromatic rice for the U.S. market and for export. However, hybrid rice seeds, although with good financial return are considered as a vital service item for the contract hybrid rice production because branded aromatic rice is the main source of revenue.

AHRA shall be organized as a management and holding corporation with subsidiary corporations for seed production, rice production, and marketing. Each company shall perform as a semi-autonomous subsidiary of AHRA.

Cash flow projection and income projection show that the establishment and operations of the AHRA are highly viable. Positive cash income is realized in the third year of the operations. Income from the sale of hybrid rice seeds and the aromatic milled rice starts to be realized once production starts by the third year of the operations. Every tranche of the loan is payable in 7 years at 4 percent interest. Only the first tranche requires a two-year grace period because there is no sale of seeds and milled aromatic rice during the first two years.

AHRA is a viable business venture that further provides vigor to the rice industry in the U.S. The venture generates additional jobs. Overall, it contributes to improving the value of the rice industry in the U.S. by producing quality branded rice of high commercial value that can compete with the Jasmine rice of Thailand.

