

Intellectual property is the cornerstone of innovation. As global population grows, developing new technologies that can feed our world becomes more challenging. Intellectual property ensures that innovators can invest the resources necessary to create the next generation of farm technologies.

RICE

Rice is the second-most widely consumed crop on the planet, providing an essential food supply to nearly 3.5 billion people each year.



Rice Statistics

Top consumers of rice¹:

| COUNTRY | Calories per day from rice |
|------------|----------------------------|
| Bangladesh | 76% |
| Cambodia | 76% |
| Myanmar | 73% |
| Laos | 70% |
| Vietnam | 65% |

“More than 90% of rice is consumed in Asia, where it is a staple for a majority of the population, including the region’s 560 million hungry people.”

- International Rice Research Institute²

CHALLENGES & SOLUTIONS

CHALLENGE
Combating malnutrition and vitamin deficiency

SOLUTION
Nutrient-enhanced rice

Developed by the non-profit International Rice Research Institute, Golden Rice aims to provide a widely available source for vitamin A in Asian countries that rely on rice for their calories. Lack of this essential nutrient causes blindness in hundreds of thousands and contributes to millions of death annually. The Golden Rice research team uses intellectual property to protect and properly develop their invention, and eventually share it with the farmers who need it most.

CHALLENGE
Rice paddy flooding can devastate farms

SOLUTION
Flood-tolerant rice

University of California-Davis has developed new hybrid rice varieties that can survive over two weeks of complete submergence, a major advancement in flood-prone areas of South and Southeast Asia where an estimated two billion farmers live³. The intellectual property on these innovations enables UC-Davis to share any commercialization benefits with developing regions through their Genetic Resources Recognition Fund⁴.

CHALLENGE
Pest pressures

SOLUTION
Pest-resistant rice

Rice farmers, on average, lose 37% of their production to pests annually in Asia and finding new ways to control insects is critical. Bt rice varieties can put insect controls directly into a plant, which will increase yields and incomes of Asian farmers, while reducing input needs. Intellectual property helps innovators working on developing new pest-resistant rice varieties protect their invention and investment.

Intellectual Property Makes Agricultural Solutions Possible

¹ http://www.knowledgebank.irri.org/ericeproduction/Importance_of_Rice.htm

² http://www.fao.org/docrep/T0818E/T0818E01.htm#Chapter_1_-_Introduction

³ <http://earthsky.org/human-world/pamela-ronald-has-developed-a-more-flood-tolerant-rice>

⁴ <http://indica.ucdavis.edu/publication/reference/genetic-recognition-resources-fund-grff>