

Rice Production under Center Pivots & Linears



RELIABLE
DRIVE TRAINS

DURABLE
STRUCTURES

PRECISE
APPLICATIONS

ADVANCED
TECHNOLOGIES

RESPONSIVE
DEALERS

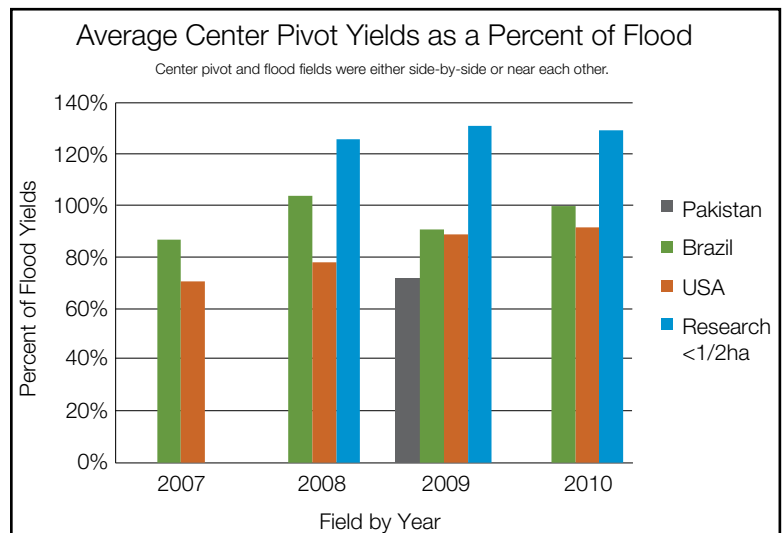
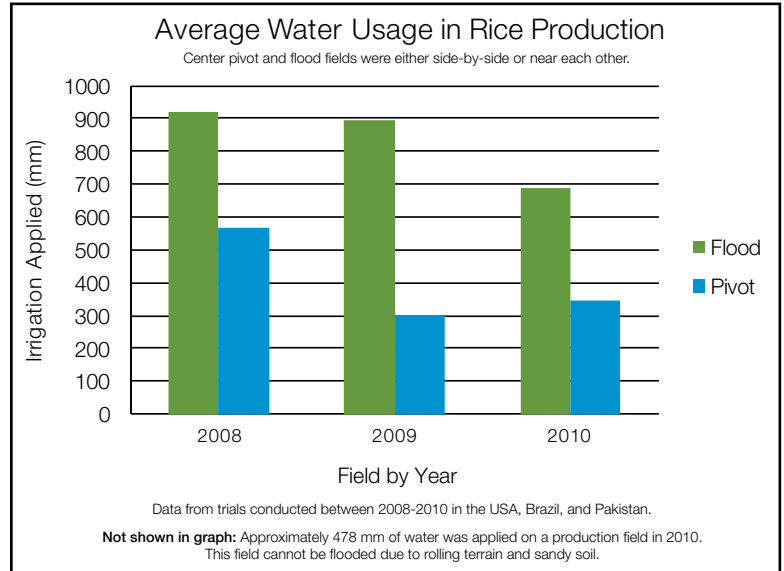


Changing the face of the earth to feed the world.

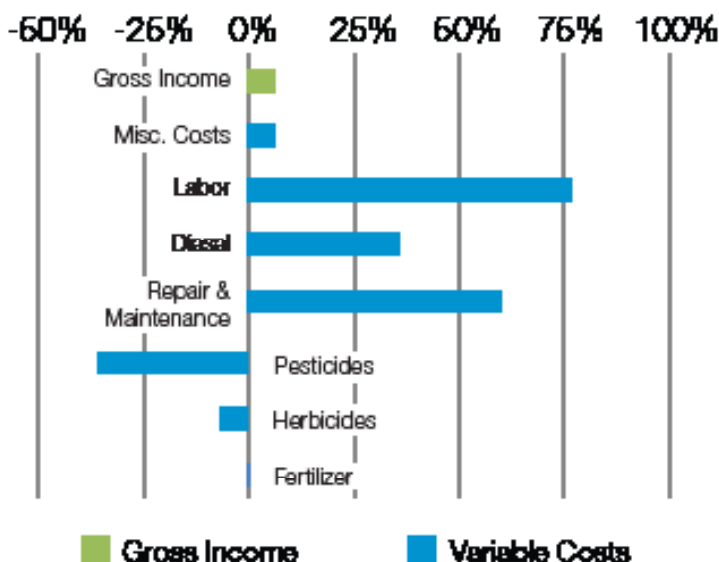
As the demand for water increases across the globe, rice producers are beginning to question traditional irrigation methods, and are thus left with a limited number of alternatives. The competition for the earth's most precious resource, along with the world's ever-growing population, has led to the concept of growing rice under center pivot and linear machines.

Center pivot and linear irrigation machines are designed to precisely irrigate a grower's field. While center pivots irrigate in a circular pattern, linears travel back and forth across a field in a straight line.

With traditional flood irrigation methods, rice must be grown on a flat or nearly flat field with specific soil characteristics; these fields often requiring extensive levelling or complex borders. However, with center pivot and linear irrigation, rice can be produced in areas that never before would have been considered possible. Because center pivots and linears can irrigate rice on most types of terrain and soils, more land can be put into rice production, therefore increasing the amount of food produced!



Average Cost Savings When Producing Rice with a Center Pivot



Percent values illustrate the difference between traditional flood & center pivot irrigation costs.

Gross Income - 5% more profitable

Misc. Costs - 5% savings

Labor - 76% savings

Diesel - 34% savings

Repair & Maintenance - 63% savings

Pesticides - 37% increase in spending

Herbicides - 7% increase in spending

Fertilizer - cost is the same

Irrigation. Technology. Conservation.

What are the benefits to growing rice with center pivots and linears?



Benefits to Traditional Rice Growers

- No need for precision levelling or contour levees
- Reduced water use by only applying water when needed
- Dry fields lead to easy and clean harvest
- Ability to precisely apply chemicals and fertilizers through the center pivot or linear
- Ability to be more profitable than with flooded rice



Benefits to Non-Traditional Rice Growers

- Minimal field preparation
- No need to apply aerial applications of fertilizers or chemicals
- Ability to grow rice on land not suitable for traditional flood irrigation
- Rice can be added to the crop rotation
- Ability to be more profitable than if growing another crop



Benefits to Society

- Center pivot and linear irrigation allow for minimum tillage, which benefits the soil
- Fewer greenhouse gas emissions
- Water conservation
- Minimal to no leaching of fertilizers and chemicals
- More food can be produced using fewer resources

The Leader in Producing Rice with Center Pivots and Linears

Valmont Irrigation is the first center pivot company to extensively research and document a preliminary process to produce rice under center pivots and linears. This process includes five major guidelines to help growers maximize yield, increase profitability, and reduce overall costs.



The process includes:

- Seed characteristics
- Chemical/fertilizer applications through the center pivot or linear
- Irrigation scheduling
- Solutions to minimize wheel tracks
- Water application packages

Circles for Rice Global Presence

Valmont Irrigation has been conducting commercial research on rice production under center pivot and linear machines since 2008. Both research and field trials have been, and are continuing to be, conducted in an effort to conserve resources and farm inputs, increase grower profitability, and produce more food for the world's growing population.

U.S.A.	2009	2010	2011
Production Sites	5	9	*
Research Sites	1	3	*
South America			
Production Sites	1	4	7
Research Sites	1	2	5
Africa			
Production Sites	0	0	** 2
Research Sites	0	0	** 2
Middle East			
Production Sites	1	2	** 4
Research Sites	0	0	** 1
C.I.S.			
Production Sites	0	1	** 1
Research Sites	0	0	** 1
China			
Production Sites	0	0	** 2
Research Sites	0	0	** 1



* Field locations still being researched at time of printing.

** Confirmation of field trial had not been finalized at time of printing.

Research sites were monitored by one of many Circles for Rice partners: RiceTec, the University of Missouri Delta Research Center, the University of Arkansas, Texas A&M University, Agricenter International, Embrapa, and Irga.

Weekly field updates!

Rice in the media!

Upcoming events!

Blog

www.CirclesForRice.com



Conserving Resources. Improving Life.

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See your local authorized Valley Dealer or Agent for complete details.

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