## Mechanized Hybrid Rice Establishment in US

## Labor \& water shortages may require modifications to common practices

Labour shortage, rise in cost hits rice production

Alvin Mendonca, TNN Aug 17,2012,06.12AMIST

Tags: Shivaraju | Hemavathi backwater.

Summer paddy cultivation crippled by agricultural costs and labor shortages

By IMNA:
Due the high costs of fertilizer, low water availability and accompanying diesel costs, and reduce amounts of workers willing to work as day laborers in summer paddies, rice farmers around Mor State have confirmed that their summer paddy harvests will fall dramatically short of the yield planned for the 2010 summer season by the Burmese government.

In the taluk, rice is grown on 12,550 hectares, out of which 3,200 1
Hemavathi backwater. Currently 9,550 hectares is available for ric

## Feeling the pinch of China's labor shortage

By Channtal Fleischfresser | March 4, 2013, 6:04 AM PST

## Farm labor shortage looms as young workers steer clear of agriculture <br> By PETER HECHT <br> The Sacramento Bee <br> Published: Thursday, Mar. 14, 2013-6:24 am

The world's largest workforce is perhaps already starting to shrink. China's workingage population declined by 3.45 million people in 2012 to 937 million, and the National Bureau of Statistics predicts declines will continue until 2030.

## WATER MATTERS News From the Columbia Water Center

Direct Seeding of Rice - A Simple Solution to India's Water Crisis?

## New technology was not an easy sale...




## Rice farming in USA is fully mechanized



## It was not easy sell to US farmer that hybrids can be seeded at low rates

| Variety and Hybrid | Seeding rate <br> (kg/ha) |  |
| :---: | :---: | :---: |
| 2000 |  |  |
| Cocodrie | $100-156$ |  |
| XL6 | 45 |  |
| 2013 |  |  |
| CL161 | $84-112$ |  |
| CLXL745 | $23-34^{*}$ |  |

*Seeding rate is based on estimated viable kernels (VK) per Kg

We have developed precision planting approaches to drill less than $35 \mathrm{~kg} / \mathrm{ha}$

$=\begin{gathered}\text { less than } 1.5 \\ \text { million seed/ha }\end{gathered}$

## Is up to the farmer the decision of how much seed he will use...

## XL753

Revenue per ha


High quality seed is a must to guarantee the expected plant stand

Special attention to seed delivery system is required

## Sweet through the whole season along with the farmer ....



## No changes on other cultural practices were required for hybrids



## The goal: Maximize seeding efficiency



## Plant nutrition to reflect hybrid needs



| Soil Type | Geographical Areas |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: |
|  | Southern AR, <br> MS and <br> North LA | South LA | North AR, <br> South East <br> MO | East TX and <br> South of <br> Houston | Wast Tx and <br> North of <br> Houston |
|  | $120-0-30$ |  |  |  |  |
| Sandy Loam | $90-0-30$ |  |  |  |  |
| Clay | $120-0-30$ |  |  |  |  |

*120-0-30 = Nitrogen applied at pre flood - mid season - boot
**For ratoon, apply 100 units of N before re flooding

## The fight against weeds require a different solution for each case...



## Timely harvest and post-harvest

 management to improve grain quality

## Hybrids show potential for pivot irrigation



## Mechanized hybrid seed productions was required to fulfill market needs



## Is not going to be easy...



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HYBRID RICE SEED

## Thanks!



