

# SEASONAL RISK MANAGEMENT

Year: 2004 - 2008

## **Funding Provider:**

Naitional Landcare Program (NLP)

#### Lead Organisation:

Grower Group Alliance

#### Collaborators

· Liebe Group

Location:

### PROJECT FUNDERS







### **REPORTS & LINKS**

#### Aim:

This project was used to analyse constraints in reaching optimal water use efficiency (WUE) and how grower groups may implement sustainable strategies to overcome these poor conditions while establishing communication networks to drive peer-to-peer solutions.

#### **Project Information:**

IIn 2004, the GGA was successful in obtaining project funding through the NLP Sustainable Industries Initiative. This has allowed five grower groups to focus on implementing sustainable agricultural production practices that protect the soil and optimise water and nutrient use in Western Australia (WA).

The project has highlighted the key constraints to production in the Northern Agricultural Region (NAR) as:

- Herbicide resistance;
- Inefficient water use;
- Changes in land capability due to salinification;
- Subsoil constraints to plant growth (i.e. acidity), and;
- Seasonal variability associated with climate change.

This project aimed to increase the awareness of these production constraints within the region and establish communication networks for growers, with both industry and/or other growers, in order to access information on possible solutions.

Liebe Group members rated seasonal risk as one of the major threats to production in the local area, and a project aimed to assess the benefits of two yield prediction tools was designed.

- PYCAL gives an indication of water limited potential yield, based on the French Schultz equation (1984). This is calculated as potential Yield (kg/ha) = Crop Water Use (mm) - Evaporation (mm) x WUE.
- Yield Prophet Uses site-specific soil characterization data, and the soil water and nitrogen content at time of sowing.