# Modernizing Irrigation Systems in Drought Affected Provinces of Viet Nam

Water Efficiency Improvement in Drought Affected Provinces Project (WEIDAP)

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### El Nino Drought 2014-2016

#### VietNamNet

#### 6 Sep 2015 2015 El Nino to continue, Vietnam to suffer from drought

Extreme weather conditions are forecast to occur from now to the end of the year, according to Le Thanh Hai, deputy director of National Hydrometeorology Centre.



#### The guardian:

#### 16 Sep 2015

El Niño: food shortages, floods, disease and droughts set to put millions at risk Agencies warn of unchartered territory as strongest-ever El Niño threatens to batter vulnerable countries with extreme weather for months

# Magnitude and Impact of ENSO

- Seasonal Rainfall deficit between 40% 70% of long-term average rainfall
- Likelihood of 2015 June Sep rainfall is less than 1%
- 400,000 ha of crop land affected
- 2 million people affected
- 18 provinces declared state of emergency
- Followed by historical floods in Dec 2016



Figure 3: Graph showing the probability of a lower rainfall for the last 12 months.

Figure 4. Bin Thuan average rainfall for the period 1983 to 2015 based on PERSIANN data and showing exceptionally low rainfall in 2015



## Government Response

- Short-, medium- and long-term response strategy
- Promoting crop diversification shift to high value crops
- Adopting high efficiency irrigation techniques
- Investing in modernizing irrigation systems
- Initiating long term investments with Development Partners (ADB)



# Government response to modernization initiatives

- Response to irrigation modernization with piped systems
- Response to enhanced level of service to farmers (flexible, ondemand water)

