Improving the Resilience of the Agriculture Sector to Climate Change (IRAS)

**Overall Objective:**
Food insecurity resulting from climate change in Lao PDR minimized and vulnerability of farmers reduced.

**Component 1: Knowledge Management**
Knowledge base on Climate Change impacts in Lao PDR on agricultural production, food security, and vulnerability strengthened.

- Government Co-financing amounts: $1,320,000
- UNDP Co-financing amounts: $775,000
- LDCF project grant: $498,070

**Baseline:** Basic regional climate change information has been compiled but this information has not been comprehensively applied to the agricultural sector. Vulnerability information is highly scattered across different public and private sector entities, government departments and development agencies and has yet to be comprehensively consolidated and disseminated to national stakeholders in a user-friendly and policy-relevant manner. Climate change data is collected systematically by different agencies. Systematic analysis of data either does not take place, or is not distributed to partners. Academic and teaching institutions are only peripherally engaged in the process of CC and adaptation analyses.

**Adaptation alternative:** Existing climate hazard and vulnerability information for Lao PDR for agricultural production will be systematically compiled, documented and assessed on the basis of global and regional climate change models. The information compiled will be used to analyze agricultural land-use planning in flood- and drought-prone areas and develop alternative land use plans for different climate scenarios.

**Output 1.1:**
Existing climate hazard and vulnerability information for Lao PDR compiled and integrated into an agriculture and climate risk information system, coordinated by NAFRI

- 1.1 Roundtable meetings with relevant agencies
- 1.2 Agreed information systems: information flow, formats, frame, responsibilities
- 1.3 Regular dissemination of information among relevant agencies and to provinces
- 1.4 Streamlining of digital information and maps, accessible online and through www

**Output 1.2:**
Scenarios for agricultural production in Lao PDR assessed on the basis of local expertise, regional and global Climate Change models

- 1.2.1 CC scenarios from international and regional sources available at NAFRI
- 1.2.2 CCC scenarios assessed regarding relevance agriculture and food security
- 1.2.3 Local and indigenous knowledge made available to inform scenario assessments

**Output 1.3:**
Agricultural land-use planning in flood- and drought-prone areas in three target sites in 3 provinces analyzed and alternative land use plans developed based on climate-risk scenarios

- 1.3.1 LoA with DPLD (MONRE) on local land use plans for target sites
- 1.3.2 Criteria and indicators for land use plans and CC adaptation defined
- 1.3.3 Development of local land use plans through DPLD or contractors
- 1.3.4 Codification into guidelines in revising land use plans with climate risk information

**Output 1.4:**
Comprehensive national long-term information system for flood and drought-related hazards and vulnerabilities, and the effects on agriculture established, managed and updated by NAFRI

- 1.4.1 Agreement among relevant partners on structure and content of information system
- 1.4.2 Establishment of database / system at NAFRI
- 1.4.3 Maintenance and update of database through NAFRI

**Project Integration:** Outcome 1 will prepare the rational basis for the planned interventions by collecting, analyzing and disseminating AAGC-data and information from other MAF, the GoL, institutions, across the country, and the region. In 2 selected districts the present status of information available will be translated into 2 land use plans anticipating future changes in land use due to climatic variations. From the very beginning (to Knowledge Base) will be fully integrated into the existing NAFRI structure to enhance sustainability prospects after 2014.