Food and Agriculture Organization
of the United Nations

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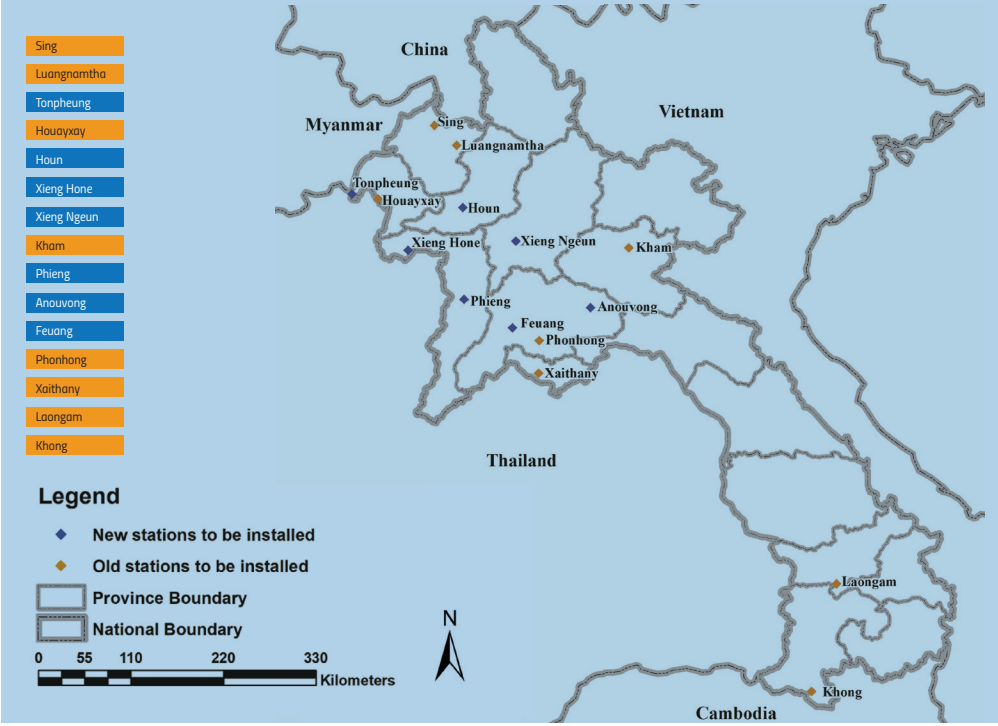
SAMIS PROJECT / Component 1

Strengthening agro-climatic monitoring, analysis, communication and use of data and information for decision-making and food security in the agricultural sector in the Lao People's Democratic Republic

SAMIS agro-meteorological stations



Laboratory for agro-meteorological sensor calibration established and agro-meteorological monitoring facilities improved at national level

15 weather stations

Eight weather stations will be improved and seven new weather stations will be installed. Also, agro-meteorological forecast will be piloted in five provinces.

Northern part: Kham, Xieng Ngeun, Phieng, Xieng Hone, Houn, LaungNamtha, Sing, Houayxay and Tonpheung Districts.

Central Part: Xaithany, Phonhong, Feuang and Anouvong Districts.

Southern Part: Laongam and Khong Districts.

Climate and Agro-meteorological Division facilities are renovated and a laboratory for calibration and maintenance of agro-meteorological essential sensors is installed.

Also, high performace computing systems for data entry and climate analysis is set up.

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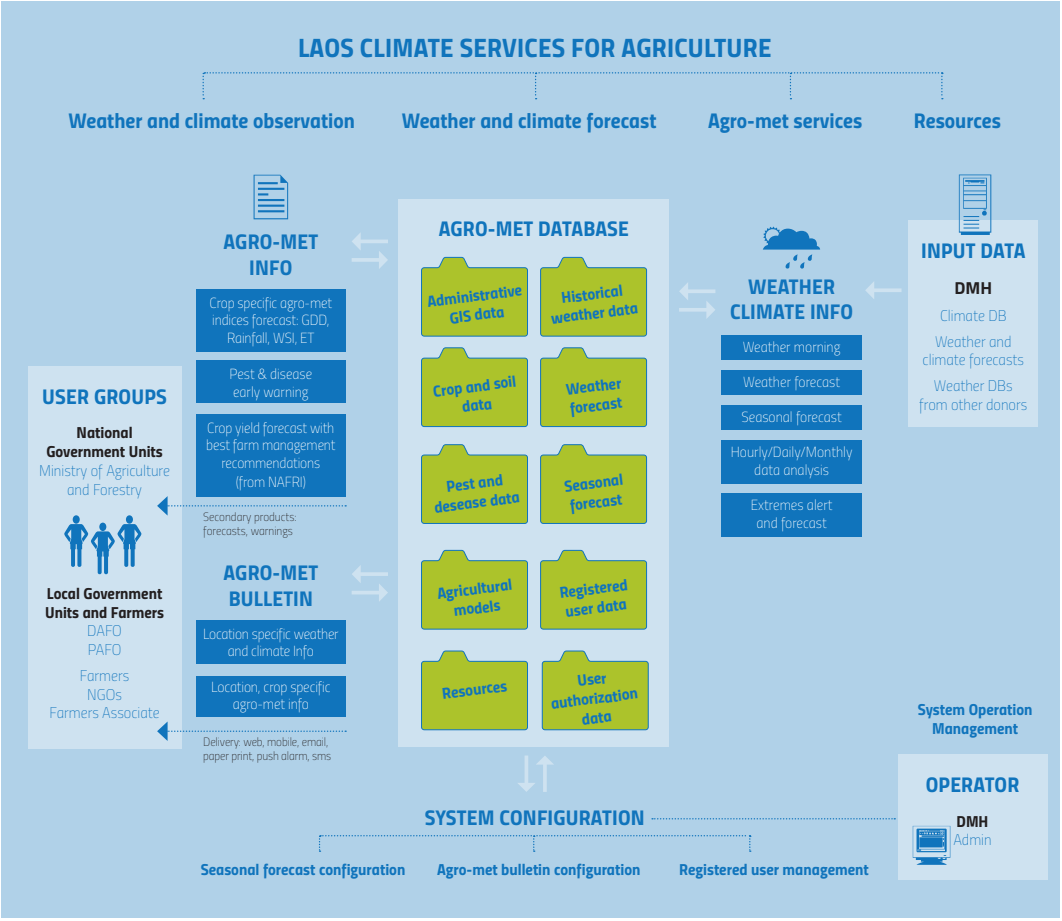
The Laos Climate Services in Agriculture (LaCSA) system

LaCSA archives and processes agro-meteorological and climatological data. By means of such data, it interpolates and provides agro-meteorological services to end-users. The system generates and delivers agro-met services to farmers by analyzing the meteorological and crop cycle data. It produces seasonal forecast and seven days bulletins. The seven days bulletin contains weekly weather bulletin, climate smart agriculture recommendations and pest and diseases risk advisory.



Products and partnerships

A first LaCSA testing phase will be developed and delivered to farmers by the 2019 season. The finalized LaCSA will be available in 2020 and will continue to be improved in the 2021 crop season. The activity is realized with the support of APEC Climate Center (APCC), and in collaboration with the Ministry of Agriculture and Forest, including the Agriculture and Forestry Research Institute (NAFRI) and the Plant Protection Centre (PCC). A collaboration with the CGIAR CIAT Research Center in Hanoi is supporting various aspects of capacity development and field level research.

Institutional capacity development

The training will be realised by RIMES (the Regional Integrated Multi-Hazard Early Warning System), by the CGIAR CIAT Research Center in Hanoi, by the Asian Institute of Technology, and by the APEC Climate Center.

Central level DMH

- Management training
- Technical training
- Communication training
- 4 guidelines: agronomic data collection, synoptic observation manual, weather observation data input, weather observation data handbook.

Local level

- Agro-meteorology in the field
- Climate information for farmers
- Collection of basic agronomical data during season
- Standard Operating Procedures training
- Automatic weather stations (AWS) maintenance

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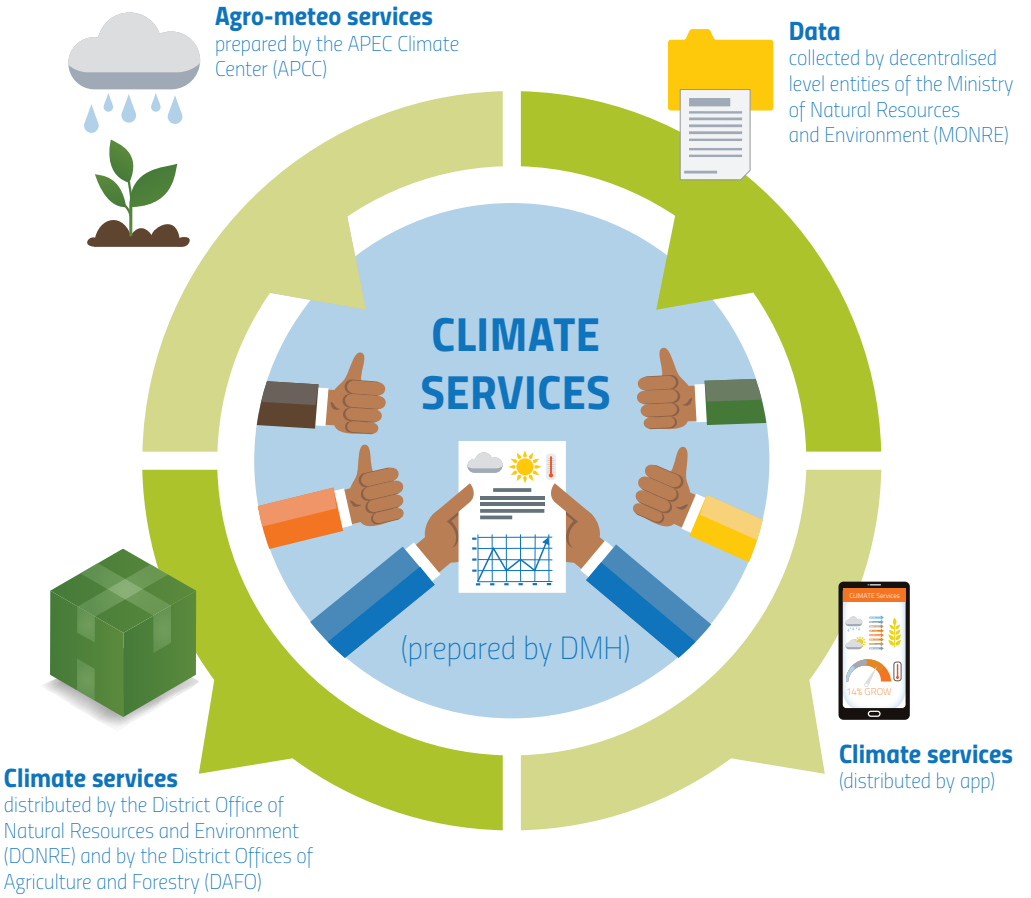
Standard Operation Procedures (SOP)

The project will prepare the procedures for carrying out a given agro-meteorological operation, or Standard Operation Procedures (SOP). SAMIS role is to help setting up an environment of discussion at managerial level and to improve the consciousness and responsibility of staff by assigning clear duties. SOP for Climatology and Agro-meteorology Division will be endorsed and approved by the Department of Meteorology and Hydrology (DMH) and at the ministry level.



Objectives

To enhance farmer capacities to make appropriate decisions during the cropping season.

To support farmers accessing and using agrometeorological data and information.

Impacts

Farmers are empowered in their decision-making and in the selection of the most appropriate agricultural practices.

Food security in rural areas is increased.

Benefits

The project will develop agro-meteorological system at national and local levels in Lao PDR, aiming at:

- Decision makers will have easy access to information about the cropping season;
- Smallholders will improve their productivity and food security;
- The sustainability of crop production will be improved over time as farmers will have access to pest and disease forecast.

www.fao.org/in-action/samis

Viengxai Manivong

National Project Director
Director of General Affair

Tel. +856 (0)20 5474 4333
vxmanivong.dmh@gmail.com

Monica Petri

Project Coordinator

Tel +856 (0)20 5914 6952
Monica.Petri@fao.org

Department of Meteorology and Hydrology (DMH)

Souphanouvong Avenue,
Ban Akat, Sikhothabong District,
Vientiane Capital, Lao PDR

Postal office: PO Box 2903,
Vientiane Capital, Lao PDR