Syrian Arab Republic
Ministry of Agriculture and Agrarian Reform
General Commission for Scientific Agricultural Research

CropWatch-ICP project
7/8/2023-10/8/2023

Presentation

by

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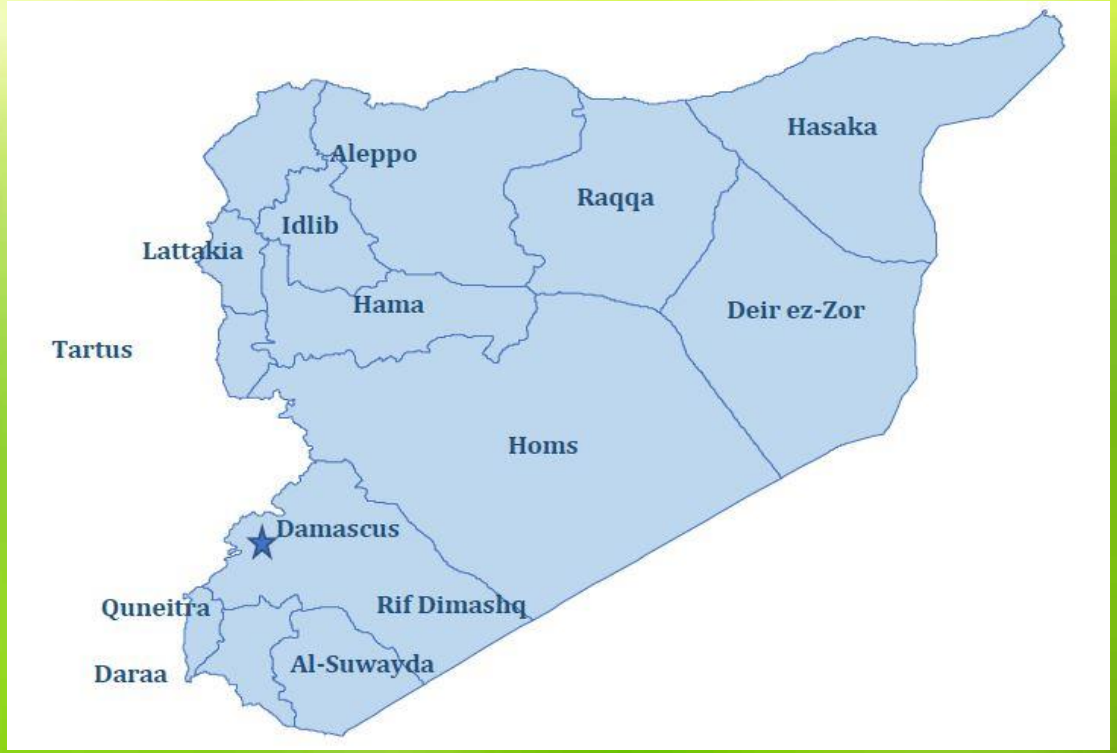
Syria is located in the northern part of the Eastern Mediterranean coast.
It is spread over 185,000 km2 with a population exceeding 20 mil people. Syria is endowed with diverse climatic and soil conditions allowing for the development of irrigation, rainfed and agro-pastoral agriculture



Agriculture is one of the most important sectors of the Syrian economy

It contribute between (17-20%) of GDP before 2011

The labor force ratio ranged between (20-25%)
The value of plant production for 2011 is 927 billion S.P

The value of animal production for the year 2011 is 356 billion S.P
The agricultural trade during 2010-2015 ranged between 19-31%

The Syrian crisis that started in 2011 caused land abandonment and lead to the displacement of a large, active number of rural populations, with resulting deterioration of soil productivity, agricultural sector and national economy

The crisis resulted in the lifted and destruction of machinery and irrigation networks, water pumps from damps and wells, conveyers and drainage canals. As a result, abandoned lands with uncultivated soils became under threat of salinity and erosion, Furthermore, during the crises period, the prices of fuel sharply increased, consequently inhabitants rely on the natural vegetation cover (shrubs and trees) to provide the required energy for heating and cooking, resulting in huge destruction of the natural vegetation cover

The destroying of natural vegetation cover caused an increase in the rate of soil loss by wind and water erosion as vegetation cover is the most affecting factor for protecting soil surface

According to the Syrian Central Bureau of Statistics (CBS)

the yield of strategic crops decreased by more than 50% for the period of crisis (2011-2016)

irrigation and drought management in the three Syrian agro-ecological and farming systems: irrigated agriculture, rainfed and dryland drought affected areas

For this, it is important to assess the status and complementary role and contribution of the soil and land management, with special attention to socio-economic conditions, to sustainable and efficient

Conditions

Statistical figure

Resources

statistical figure

A

The statistical figure in agriculture is considered an important tool

B

It is a measure of country progress, in order to develop appropriate polices to support economic growth

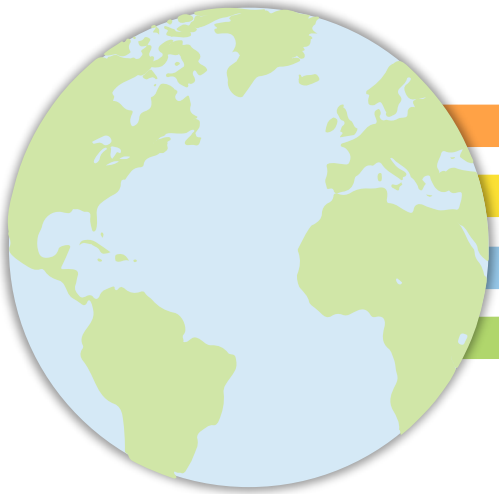
C

This statistical figure changes overtime, as a result of several social, economic and environmental factors

D

The agricultural plan in Syrian Arab Republic depends on the annual agricultural statistics that is fulfilled by Ministry of Agriculture and Agrarian Reform (MAAR)

statistical figure



SNARS project is derived into many programs, the most important one is estimation of crop area and yield

A

The government in Syria began searching for other methods to increase the accuracy of the agricultural statistical figures

B

The modern techniques and software were used to increase the accuracy of these figures, such as remote sensing (RS) and Geographic Information System (GIS), because they are characterized by inclusiveness, multispectral, time frequency and high spatial accuracy discrimination

C

RS is considered the most essential and modern technique that is used in different scientific fields, where agriculture has the largest share

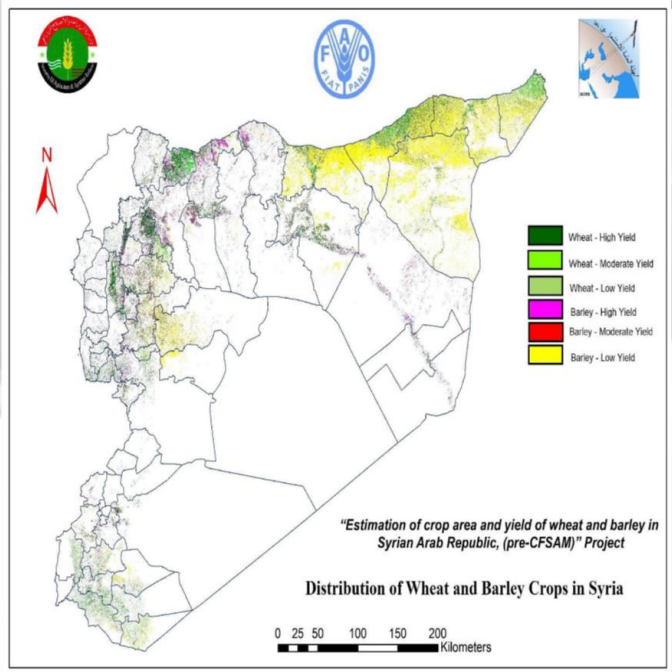
D

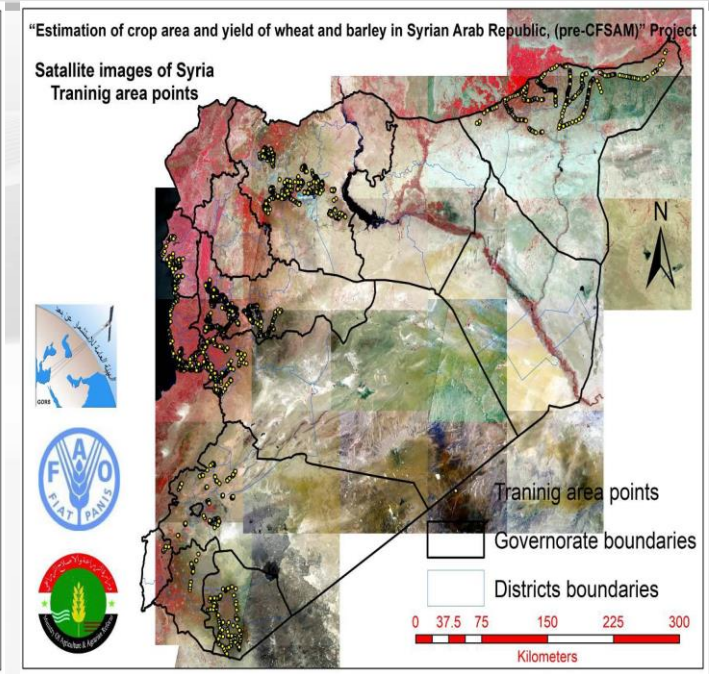
RS was used to study many different phenomena, to get quick results and solutions, besides saving time, effort and cost

Project

Estimation of Crop Area and Yield of Wheat and Barley in Syrian Arab Republic (Pre-CFSAM)

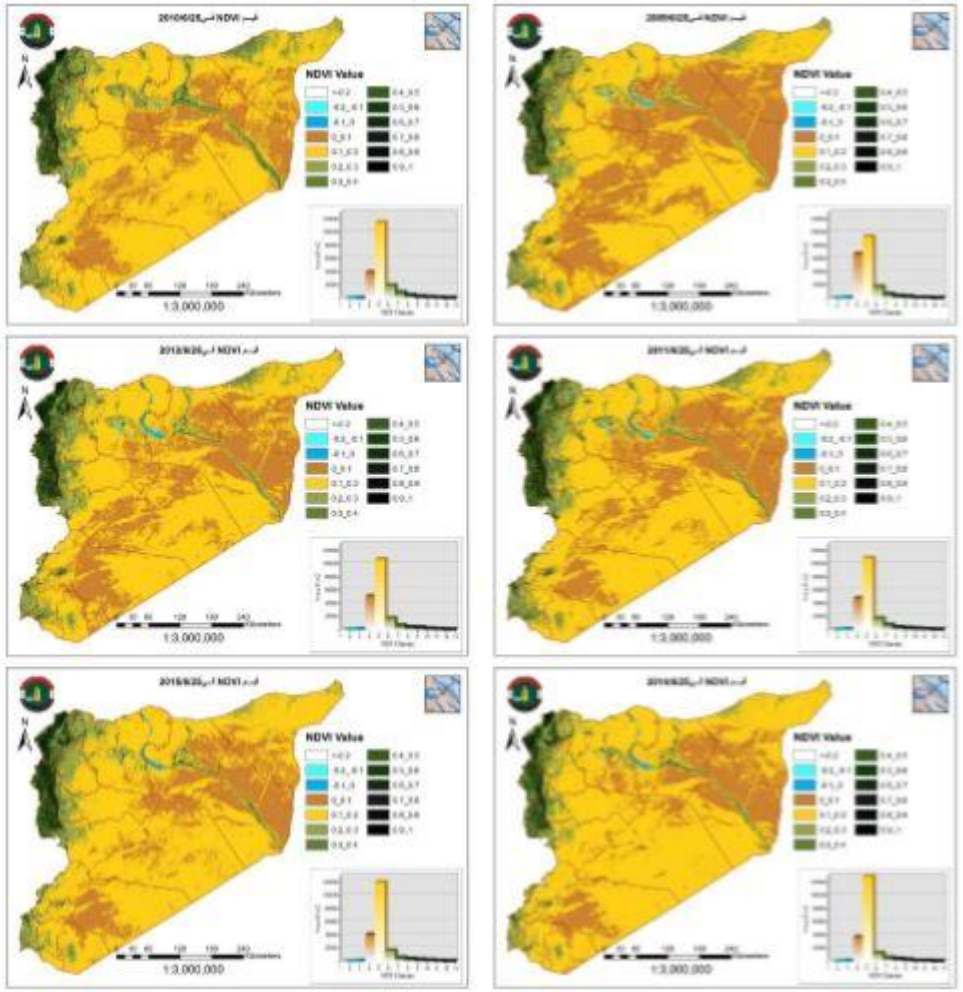
Goals of this research:
Estimation of wheat and barley-planted areas and yields in Syria, and creation of area and yield maps for both crops at governorates and districts level.





Project

Drought Monitoring in Syria by using remote sensing



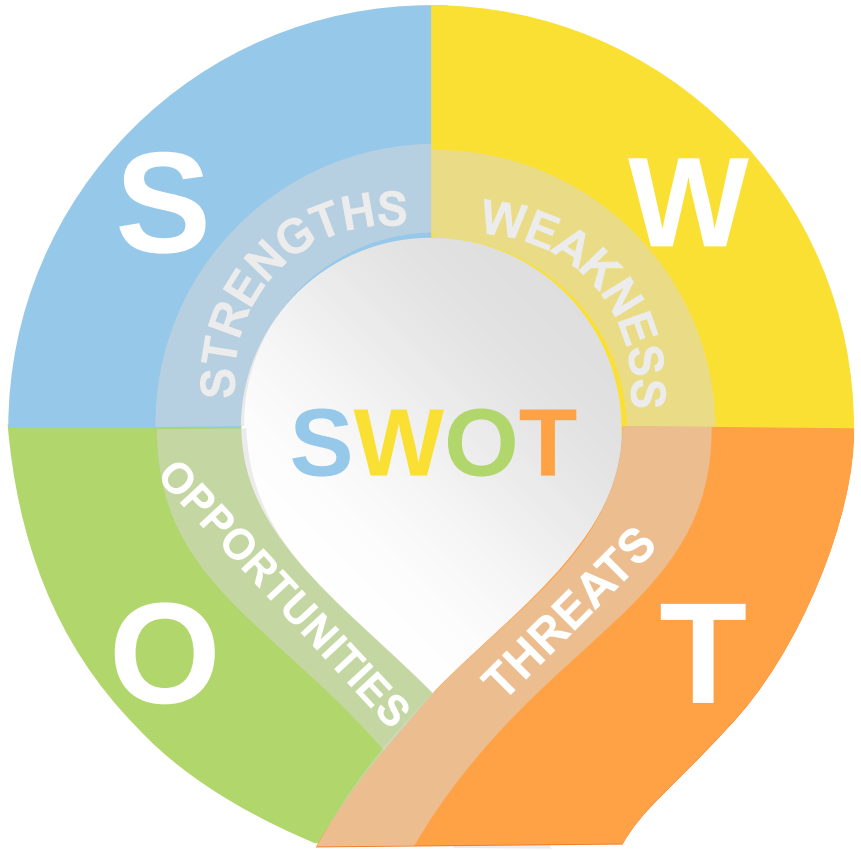
NDVI, LST, VCI, TCI, VHI, SPI maps production from MODIS satellite images for Syria every 16 days between 2001-2015.

According to results, the report recommends this points:

Use Vegetation Health Index (VHI) and Precipitation Index Standardized Precipitation Index (SPI) to monitor droughts in Syria.

CropWatch

The upgraded technical base involving advanced tools like remote sensing and GIS will enable carrying long term integrated national assessment and monitoring activities to build and restore the national database and support informed decision making



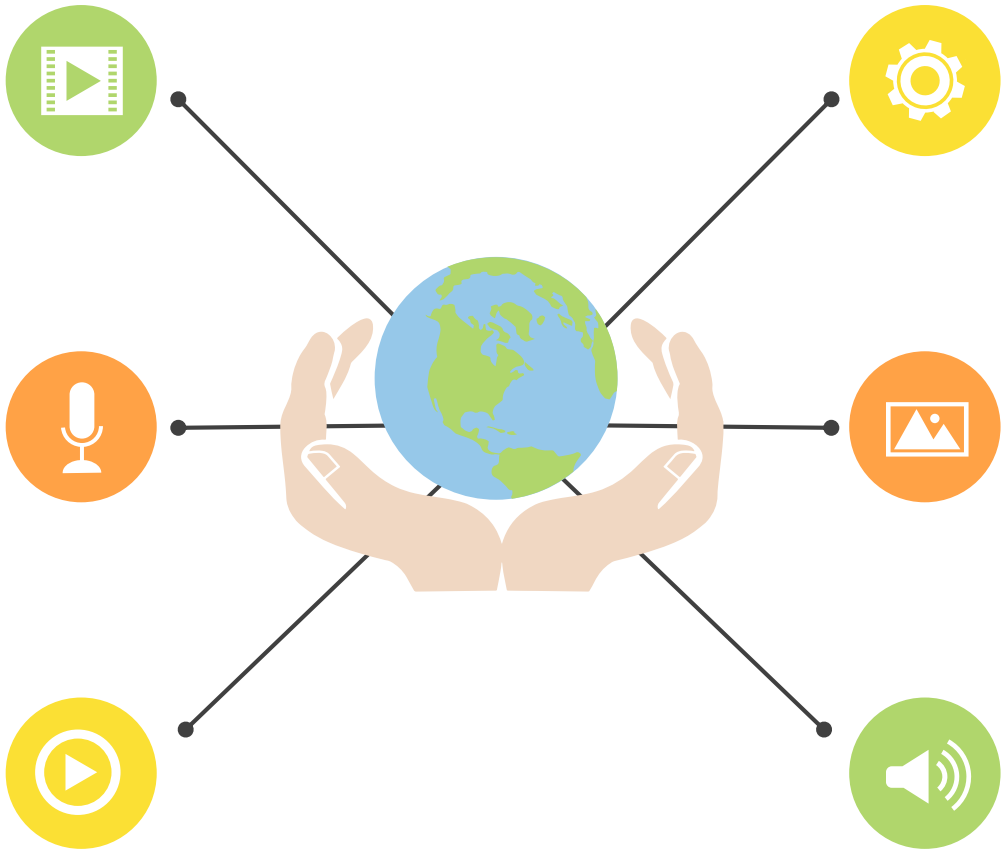
There were significant losses of qualified human resources and technical expertise during the long Syrian crisis, resulting in a gap in national technical administration and support

by the conclusion of this program, we will be able to track crops using a variety of methods based on accurate, reliable, and timely information in order to make informed decisions

The current situation necessitates a broad and urgent capacity-building program to reinforce line ministries' technical arm

CropWatch

For more information, please visit the following links:
http://www.cropwatch.com.cn/htm/en/bulletin69.shtml
Bulletin covers the period from April to July 2022
http://cropwatch.com.cn/htm/en/bulletin70.shtml
The November bulletin covers the period from July to October 2022
http://cropwatch.com.cn/htm/en/bulletin71.shtml
February Bulletin covers the period from July to January 2023
http://cropwatch.com.cn/htm/cn/bulletin72.shtml
The May Bulletin covers the period from January to April 2023



Syria was as part of a global bulletin based on an CropWatch platform, reviewing the climatic changes (rain - solar radiation - temperature) accompanying the cultivated crops in addition to some indicators for the platform (NDVI-VCI) for the years 2022 and 2023, and one of the most important additions to this bulletin was the regions Environmental Agricultural in Syria and its divisions, and therefore this publication has been officially approved on an CropWatch platform

Thank you