

THE BUILDING FORWARD BETTER INITIATIVE

Challenges and lessons. The Libyan case

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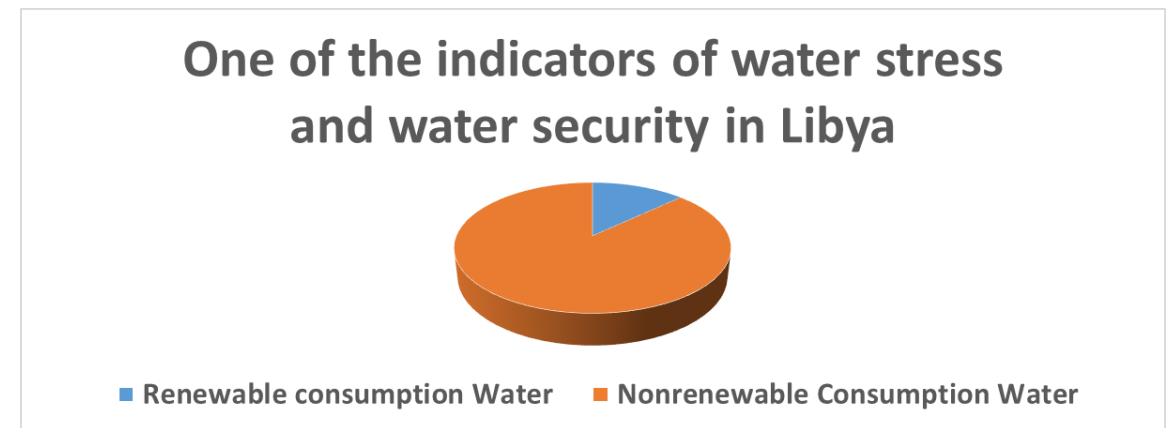
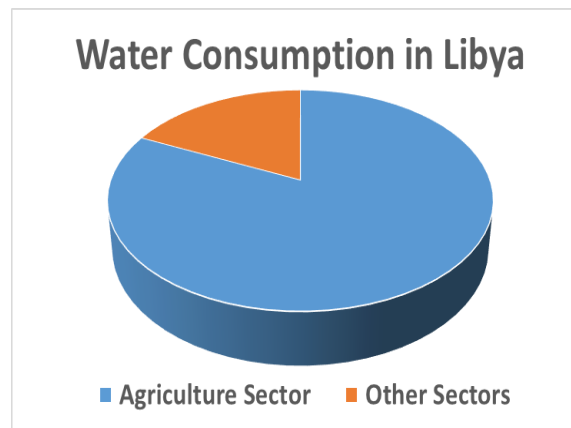
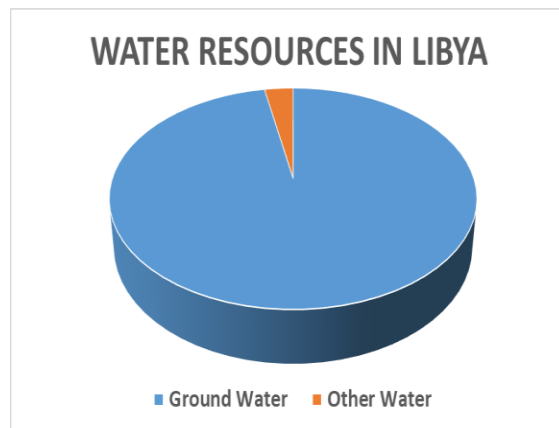
IMPORTANCE OF THE BFB INITIATIVE

As the Director of the Department of Water Use in Agriculture which was newly formed by integrating the Department of Irrigation and Drainage and the Department of Soils, and as the National Coordinator for FAO projects in Libya: MerWat and IagWat, I found most of the topics of the BFB training courses are relevant to the tasks conducted by the Department, and in particular:

1. The internal organization of the Department of Water Use in Agriculture.
2. Interaction with the components of the two FAO projects in Libya on water consumption by the agricultural sector, MerWat and IagWat.
3. Develop a project to rationalize water consumption in agriculture.

A PROJECT TO RATIONALIZE WATER CONSUMPTION IN AGRICULTURE BY RATIONING IRRIGATION WATER

Based on the water situation and water use in agriculture in Libya, a project vision was defined along with clear goals and defined outputs, as well as a timetable for implementing the project's various stages.



A PROJECT TO RATIONALIZE WATER CONSUMPTION IN AGRICULTURE BY RATIONING IRRIGATION WATER

The Vision:

Reducing acute water stress on water resources (groundwater) by rationalizing the use of water in agriculture as it is the largest water-consuming sector through fixing irrigation duration and irrigation intervals.



A PROJECT TO RATIONALIZE WATER CONSUMPTION IN AGRICULTURE BY RATIONING IRRIGATION WATER

The Objectives

- Drawing a climatic classification map of agricultural zones, based on recorded and projected climatic data and remote sensing applications.
- Building an agrometeorological network covering all climatically classified agricultural zones in Libya.
- Determine the proper time for forecasting evapotranspiration for the days following the date of observation in the climatically representative zones.

A PROJECT TO RATIONALIZE WATER CONSUMPTION IN AGRICULTURE BY RATIONING IRRIGATION WATER

- Programming an online application available to all water users in agriculture that allows irrigation scheduling for different crops.
- Building a database of soil information that covers water use in irrigation and irrigation systems and devices used in agricultural areas.
- Building and strengthening capacities to use modern technologies in the field of water use in agriculture and irrigation scheduling.
- Training practitioners of irrigation operations on processes that contribute to raising the efficiency of the irrigation water unit and thus raising its productivity and economic return.

COMPONENTS OF THE PROJECT

- The project consists of 10 phases containing 32 activities.
- The first phase started in January 2021 and is nearing completion. It includes monitoring weather conditions (minimum and maximum temperatures) for 78 sites covering most of the agricultural areas in Libya.
- The other stages are related to analyzing the monitored data, comparing it with real data, and making necessary calibrations in cooperation with the National Center of Meteorology.
- Building and linking databases on irrigation operations and irrigation scheduling.
- Designing and building an interactive application on the Internet using mobile phones, and building advisory and advertising programs that guarantee the spread of the application in a way that is available to all water users.

THE TWO FAO PROJECTS IN LIBYA: MERWAT & IAGWAT

- **MerWat:** Monitoring, Evaluation, and rationalizing water use in agriculture. This project is funded by the Italian Agency for Development Cooperation.

MerWat رصد و تقييم وترشيد استخدام المياه بالقطاع الزراعي في ليبيا
Monitoring, evaluation and rationalization
of water use for agriculture sector in Libya

- **IagWat:** Evaluation of irrigation infrastructure, crop mapping, and estimation of agriculture water use in LIBYA, This project is funded by the African Development Bank.

IagWat تقييم البنية التحتية للري ورسم خرائط المحاصيل وتقدير استخدام المياه الزراعية في ليبيا
Evaluation of irrigation infrastructure, crop mapping
and estimation of agricultural water use in Libya

THE TWO FAO PROJECTS IN LIBYA: MERWAT & IAGWAT

- These two projects, as indicated by their titles, include most of the topics covered in the training courses of BFB initiative, in addition to the use of remote sensing and geographic information systems techniques, on which the two projects rely in monitoring and evaluation.
- The two projects are implemented by FAO in partnership with the Ministry of Water Resources (main partner), the Ministry of Agriculture and Livestock, the Libyan Center for Remote Sensing and Space Sciences, and the National Meteorological Center.
- Their implementation period is two years, ending in early 2024.
- A national multidisciplinary technical team was formed, of whom 8 out of 22 participated in the training courses of the BFB initiative, 6 of whom are with us in this workshop.

CONCLUSION

As you have noticed, most of the topics covered by the BFB initiative are directly related to the tasks of our department, and it is an opportunity for us - especially after the recession period imposed on us by the circumstances of our country - to rebuild and arrange the specializations and tasks of our department, and to open horizons for constructive institutional cooperation, so that we can work for Raising the level of water security, achieving acceptable food security, and sustaining them.



FINALLY

On my behalf and on behalf of my colleagues from Libya, we are pleased to extend our thanks and gratitude to everyone who contributed to the preparation and implementation of the “Building Forward Better initiative. I would also like to emphasize the great benefit obtained from the initiative’s programs, hoping that we will be of assistance to our country and our people in creating progress and prosperity, through our endeavor to raise the chances of achieving water and food security.



THANK YOU
FOR YOUR ATTENTION



WATER
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