



Una visión desde los jóvenes ante los nuevos retos de la gestión integrada de zonas de riego



LA DISPONIBILIDAD DE AGUA Y ENERGÍA EN UN ENTORNO INCIERTO



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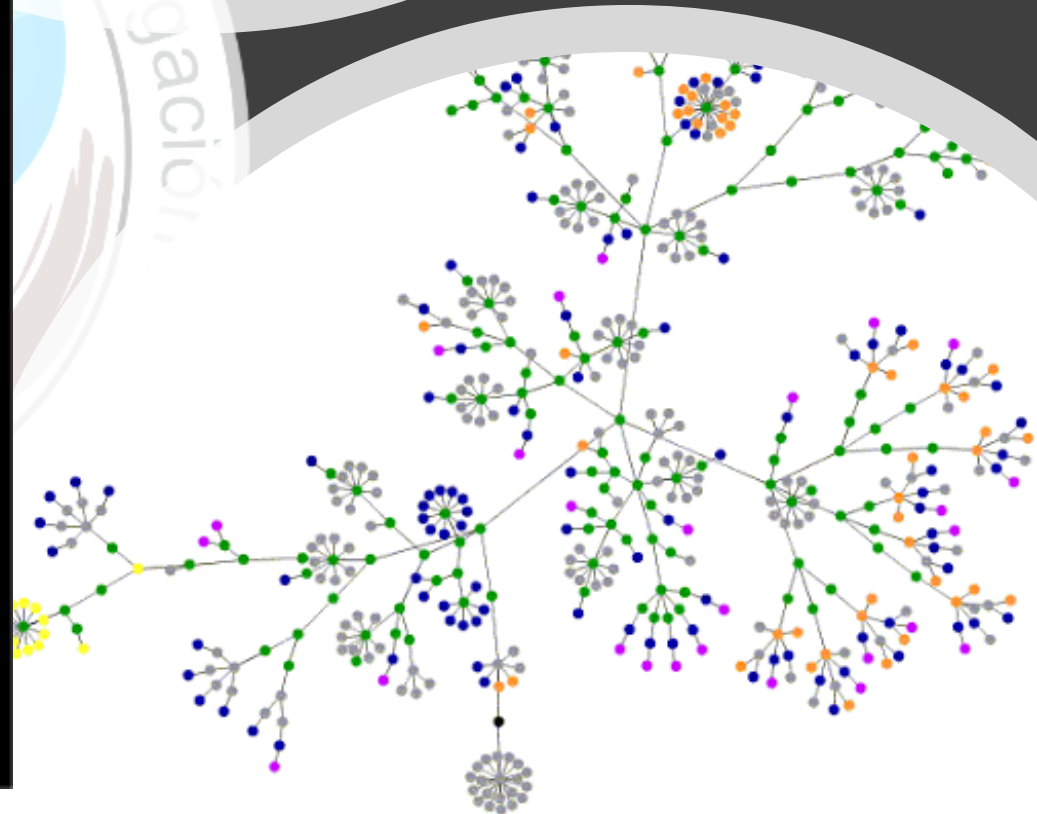
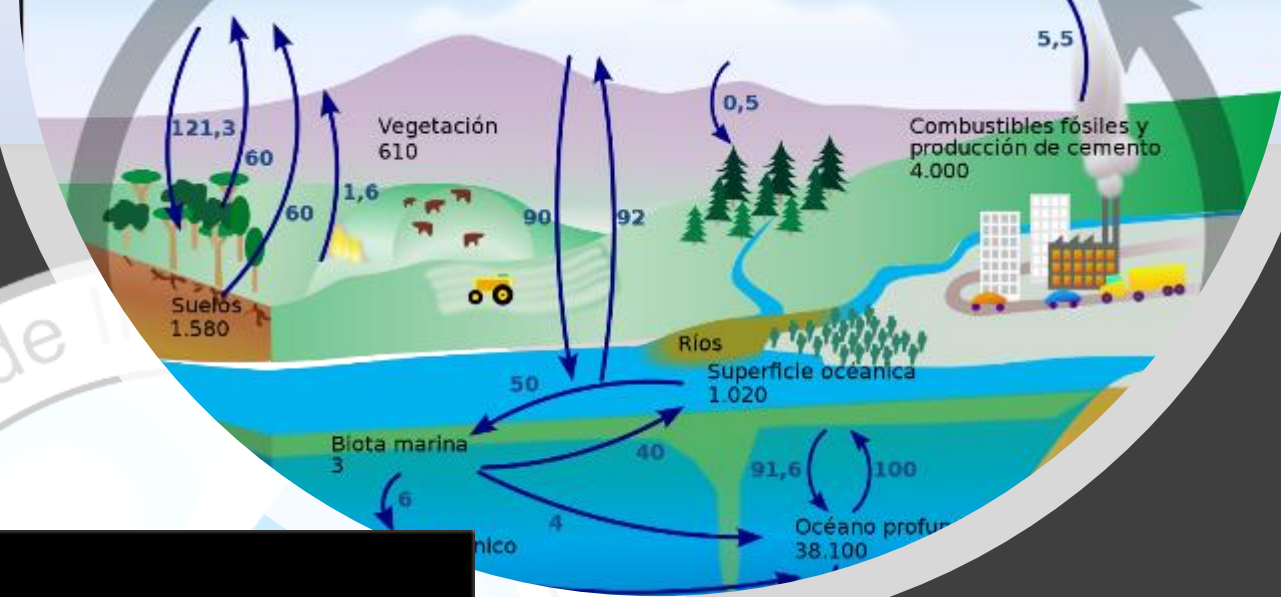
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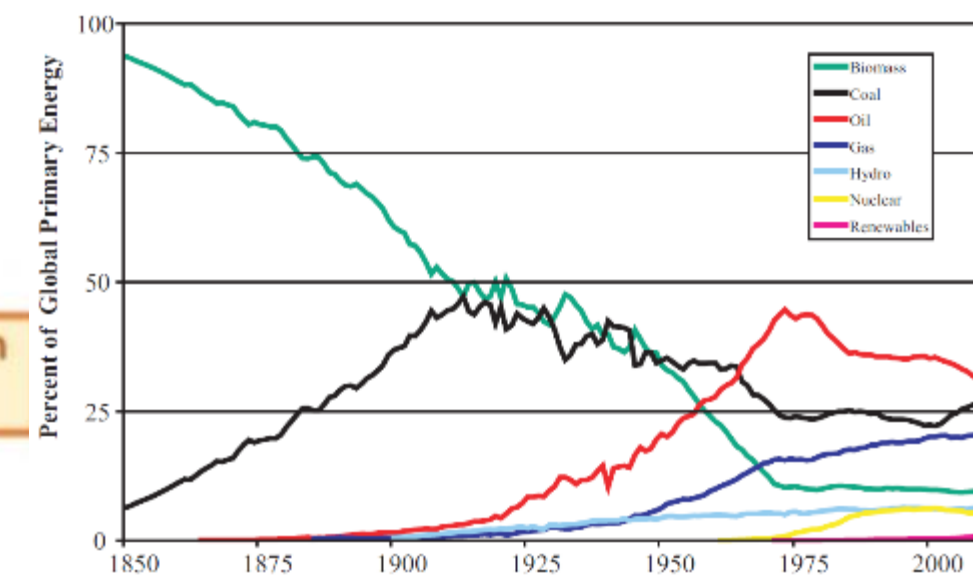
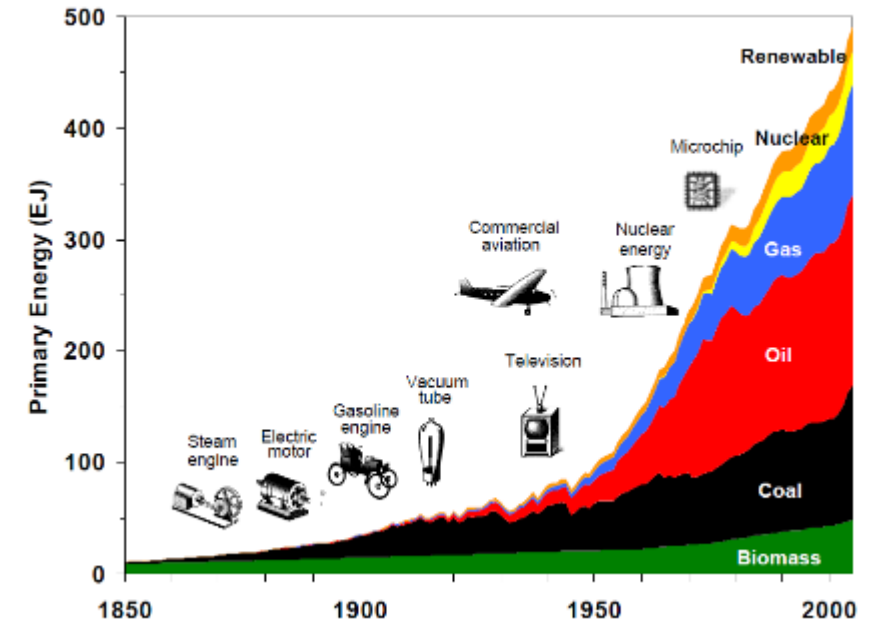
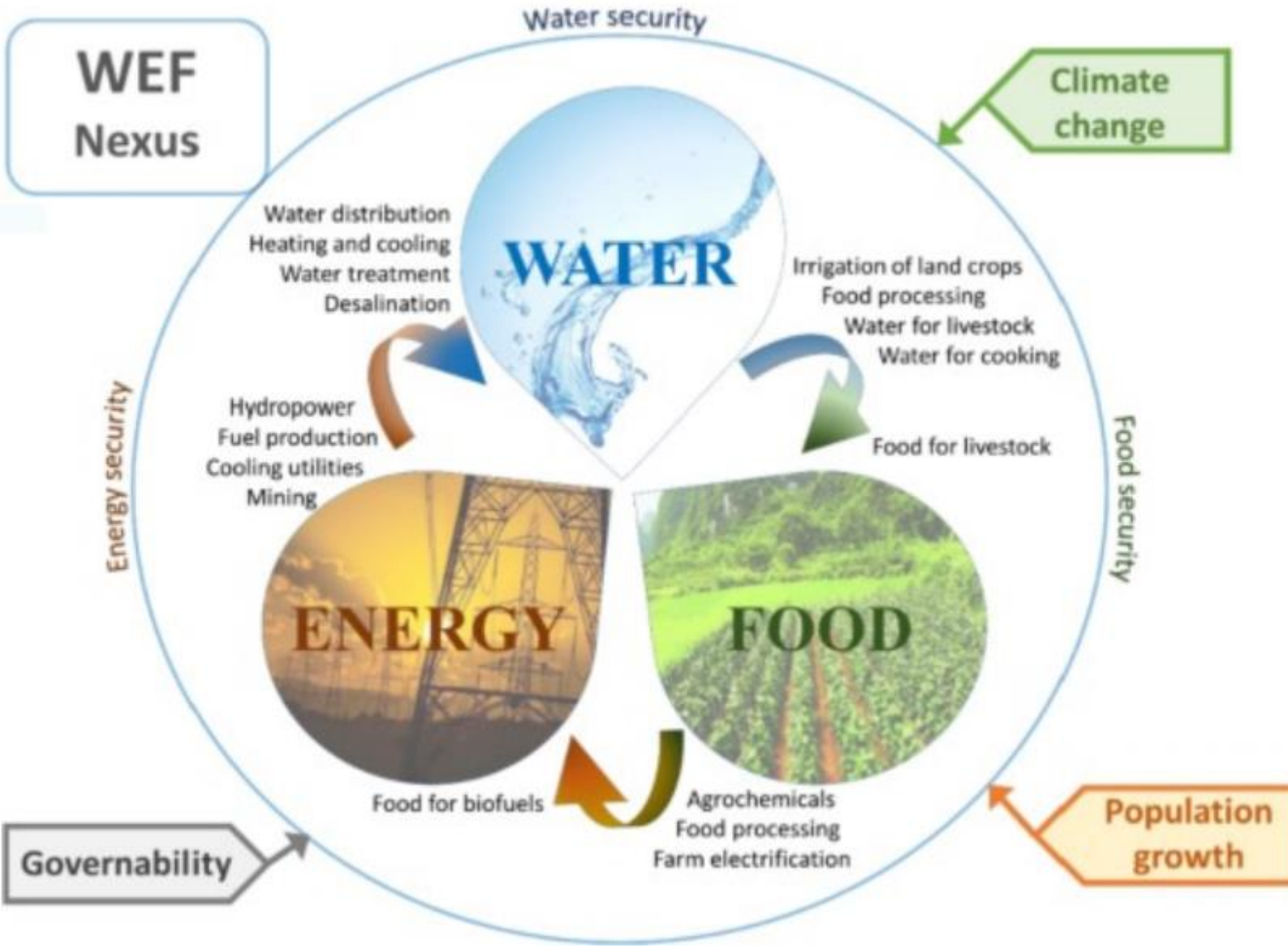
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Jueves, 20 de agosto del 2020

Complejidad

- Dinámica no lineal
- Caos
- Autoorganización
- Interconexión





Técnicas de análisis

- Variables de estado
- Escala espacial
- Resolución Temporal
- Estabilidad
- Tiempo de computo
- Disponibilidad de datos
- CFD
- Métodos Montecarlo
- Redes Neuronales
- Clasificación no supervisada
- Automatas celulares
- Agentes



Mobile weather stations: a new solution for flood protection



Connectivity

Weather sensor boards with Arduino software send text messages with weather information directly to mobile phones.



Up-to-date data, faster response times

Weather information is recorded every **5** minutes and stored up to **5** years.



Instant alerts and larger buffer times help communities manage flooding.

Climate solutions

Off the shelf, open-source mobile weather stations aid irrigation officials, reservoir managers and farmers in flood reduction and flood risk preparation.

Floods and hydrological disasters represented 52% of natural disasters in 2011,

causing 139.8 million victims and more than USD \$70 billion in damages.¹

Adaptable weather sensing

An easy-to-modify system means that users can measure information like:

- wind speed
- pressure and humidity
- water pollutants
- wind direction
- rainfall
- water level



Solar-powered

A rechargeable battery and a solar panel keeps the weather station self-powered and low-maintenance.



Cost-effective

USD \$350 = the total cost to assemble, activate, and install one station.
10 years = the amount of time between replacements.



Flood management can contribute to significant savings in post-disaster recovery expenses.

Each weather station pays for its cost in **2.5 years.**

Download the open-source manual to build your own weather station:
www.iwmi.cgiar.org/resources/mobile-weather-stations.

Muchas gracias

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