

WATER STEWARDSHIP

*European Rivers Symposium - 27th May, 2021* 

SUSTAINABLE AGRICULTURE AND WATER MANAGEMENT towards new synergies

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#### **Purpose of presentation**

To provide an outline of the <u>synergies</u> that exists between EU directives/strategies relating to water and agriculture and water stewardship... ... and to articulate and illustrate the following proposition:-

Through water stewardship, businesses/private companies in food production, processing, trading and marketing may participate in activities <u>contributing to the goals</u> of river basin planning under the EU Water Framework Directive and related EU directives/strategies.

### What is 'Water Stewardship'?

Stewardship is about taking care of something we do not own. The availability of sufficient water of good quality is a matter of shared concern, as well as individual interest.

A key first step to addressing the concern is awareness and understanding of the situation relating to water (both quantity and quality) in the 'catchment' and river basin in which a given water user's farm or factory is located and, where there is a water problem(s), the water user is willing, on a <u>voluntary</u> basis, to respond with action...

... not alone, but rather in collaboration with other water users - other farmers/businesses in the catchment.

In doing so, they will contribute to progress towards the goals which the <u>mandatory</u> legal/regulatory framework of the EU Water Framework Directive is designed to achieve:-

*«the long-term protection of available water resources»* (Article 1, WFD) including *«non-deterioration of the quality of waters»* (Article 19, WFD).

### **SYNERGIES**

WFD Preamble (13) «... the planning and execution of measures to ensure protection and sustainable use of water in the framework of the <u>river basin</u>».

The hydrological unit of the <u>river basin and catchment</u> is key to water stewardship.

«The EU's legal framework on water is ambitious, but implementation is lagging behind and enforcement must be stepped up»: EU Biodiversity Strategy, May 2020, page 11. Stewardship contributes by encouraging voluntary initiative to tackle «shared water challenges» (AWS Standard, Steps 1.6 and 3). Stewardship can promote <u>participation</u> in WFD basin planning processes, including the challenge of mobilising businesses and private companies (most farms, processing plants/factories, buyers/wholesalers and retailers are privately owned and managed).

«Water <u>scarcity</u> is becoming increasingly frequent and widespread in Europe» (European Environment Agency, December 2019, page 109).

← The AWS Standard guides water users, over time,
 ← towards achievement of a <u>sustainable water balance</u> in the catchment (Steps 1.5 and 3.3).

#### **SYNERGIES - 2**

*«European food should become the <u>global</u> standard for sustainability»: EU Farm to Fork Strategy, May 2020, page 3).* 

The AWS Standard is a <u>global</u> standard *«applicable to all sectors … including agriculture»* (AWS Standard, page 5). i.e. it is applicable in the 27 Member States as well as all other countries from where the EU sources its food.

The EC commits to act to *«reduce the use of* [nitrogen and phosphorus] *fertilisers by at least 20%, by 2030»*: EU Farm to Fork Strategy, page 7).

Water stewards undertake to identify and manage <u>discharges</u> from their sites (fields or built premises) and inform themselves of the physical, chemical and biological <u>status</u> of water in the catchment where those premises are located (Steps 1.1 and 1.5 of the AWS Standard).

«Give back to nature more than we take away... Companies rely on ... ecosystem services as critical inputs for production»: EU <u>Biodiversity</u> Strategy, May 2020 page 2). In their water stewardship plans, water stewards undertake to contribute to the *«maintenance and enhancement of <u>conservation areas</u> and other natural ecosystems of high value»* (called Important Water-Related Areas in the AWS Standard (Steps 1.3 and 3.5).

#### **SYNERGIES - 3**

*«The food industry and retail sector should show the way»*: EU Farm to Fork Strategy, page 12).



By implementing the AWS Standard, the food industry - growers, processors, buyers/traders and retailers - can show <u>leadership</u>...

... and is doing so...



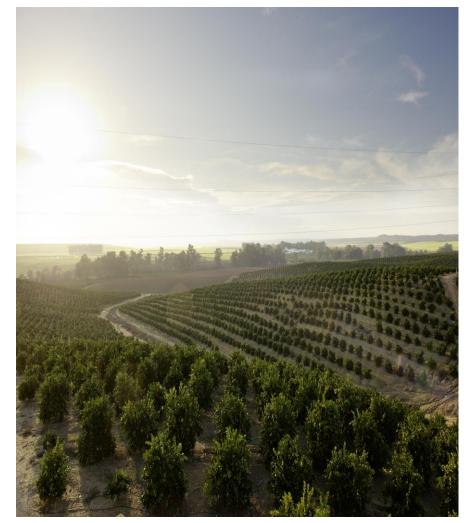
# **CASE STUDY 1: IBERESPARRAGAL**

Citrus farm of c.200 hectares located about 20 kms northwest of Sevilla, in the *Guadalquivir* river basin, in southwest Spain.

The farm is owned by the Spanish company, *Iberhanse-NaturGreen*, which promotes environmentally-friendly agricultural practices.

The farm supplies oranges and mandarins to the German retailer, EDEKA, which has, in collaboration with WWF, showed its leadership in water stewardship.

The farm chose to implement the AWS Standard and was certified 'Gold' in June 2018 (as per SGS certification audit report of June 2018).



# **IBERESPARRAGAL - 2**

The farm is located in a <u>nitrate</u> vulnerable zone (note (i)). The EU has noted groundwater monitoring stations in the region recording high average nitrates concentrations (note ii).

As part of its water stewardship plan, the farm has reduced its use of nitrate fertilisers in 2019 and 2020 by 23.3% to 3.26kg of <u>nitrates</u> per hectare and tonne of produce (note (iii)).

That is substantially below the limit of 6kg required for N fertilizer use on Citrus in the action programme established by Andalucía (note (iv)) under the EU Nitrates Directive.

Pesticide use by the farm was reduced from 2019 to 2020 by 11.85%.

(i) As noted in the SGS certification audit report, June 2018 (page 11).
(ii) In <u>the May 2018 EC report on implementation of the Nitrates Directive (91/676/EEC).</u>

(iii) Source: Iberhanse-Naturgreen: communication of May 2021..

(iv) Boletín Oficial de la Junta de Andalucía, n°214, 5 de noviembre 2020, page 33).

<u>Good Stuff International-GSI has provided support to the project as per this information available on its website:</u> <u>http://www.goodstuffinternational.com/index.php/en/news/54-news/299-water-stewardship-practice</u>

### **IBERESPARRAGAL-3**

The June 2018 audit report noted the forecast *«reduction in precipitation»* medium/long term in the Guadalquivir basin (6-8% by 2040) according to the regional <u>climate change</u> strategy = *«less water available for irrigation in Summer»* (p.10).

The water consumption at Iberesparragal farm was reduced by 52.96% in 2019 (July 2020 surveillance audit report, p.25), including control of the following parameters: pressure, flow.

The farm has turned 30 hectares of citrus into a biological reserve to encourage <u>biodiversity</u>, while at the same time focusing water use on the citrus production in other areas of the farm.

As regards the shared challenge of reduced water availability, there is the need (note (i)) for Iberesparragal to *«promote together with other farms and with the irrigation communities and ultimately with the water authority* (the 'CHG') *a system for the allocation of water rights»* to take account of *«annual variability»* of water.

Summer 2021: CHG has announced a reduction for abstractions by farmers of 40-50% (note (ii)).

(i) Source: the 2020 surveillance audit report noted (page 23).

(ii) Source: GSI.

## **IBERESPARRAGAL - 4**

The AWS Standard has provided a framework to identify and engage key stakeholders in the catchment - other farmers, the catchment authority, public agencies.

Miguel Hidalgo, Operations Manager at the farm:-

«We had little idea about the catchment we are located in, its water balance, quality, stakeholders and the impact to and from our activity in the farm. The Zitrus Project and AWS implementation provided us a valuable knowledge and understanding on the catchment context we didn't have before» (AWS Case study, 2018).

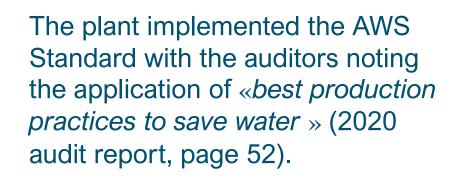


<u>The benefits of water stewardship have included:</u> increased capacity (on water use, biological pest control, biodiversity management); dialogue and collaboration with other farmers; a more resilient farm; and strengthened commercial links with EDEKA: a sustained series of supply contracts ensuring these oranges and mandarins are brought to customers.

## **CASE STUDY 2: MIAJADAS**

Tomato sauces production plant owned and operated by Nestlé (employing 90 people) in Miajadas, in Cáceres province, Extremadura region, in the *Guadiana* river basin, sold under the Solís brand as local brand and Maggi and Buitoni.

Agriculture accounts for most of water consumption in Extremadura, c.80%.



# **MIAJADAS - 2**





A key focus was on water management in the tomato fields by the primary tomato producer for the Miajadas plant, CONESA.

CONESA accesses irrigation water from the Orellana canal (115 kms long) near the wetlands (a RAMSAR/NATURA 2000 site).

In collaboration with Fundación Global Nature, CONESA's farm has led other local farmers (450 hectares) in a project called *Solís Responsable* promoting sustainable production practices including reduction of fertiliser and pesticide use (5.2% and 3.5% respectively in 2019), alongside irrigation efficiency measures.

As per the 'stakeholder-inclusive' process of the AWS Standard, the Miajadas plant engaged with local actors, e.g. Mayor and City Councillors (2020 audit report, page 8).

The Miajadas plant was AWS certified 'Gold' in May 2020.

#### Examples of companies in food & beverages who are AWS Members





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The <u>AWS Standard</u> is a set of principles & steps providing a robust practical guide for achieving stewardship - a 'code' of best practice in water management. The <u>AWS System</u> provides for <u>independent verification by</u> <u>auditors</u>, leading to certification, to show compliance with the criteria & indicators set out in the AWS Standard.



Download the AWS Standard at: www.a4ws.org

