Olives New Zealand

**Olives New Zealand**
**AGM - Field Walk - Awards Dinner**
**Saturday the 15th of October**

GEA Westfalia Separator NZ Ltd.

# Some business and economy consideration about the word wide olive oil sector

Juan Vilar Hernández, Director General del Centro de Desarrollo y Competencia para Aceite de Oliva, Gea Westfalia Separator Ibérica, Profesor Asociado Doctor Universidad de Jaén



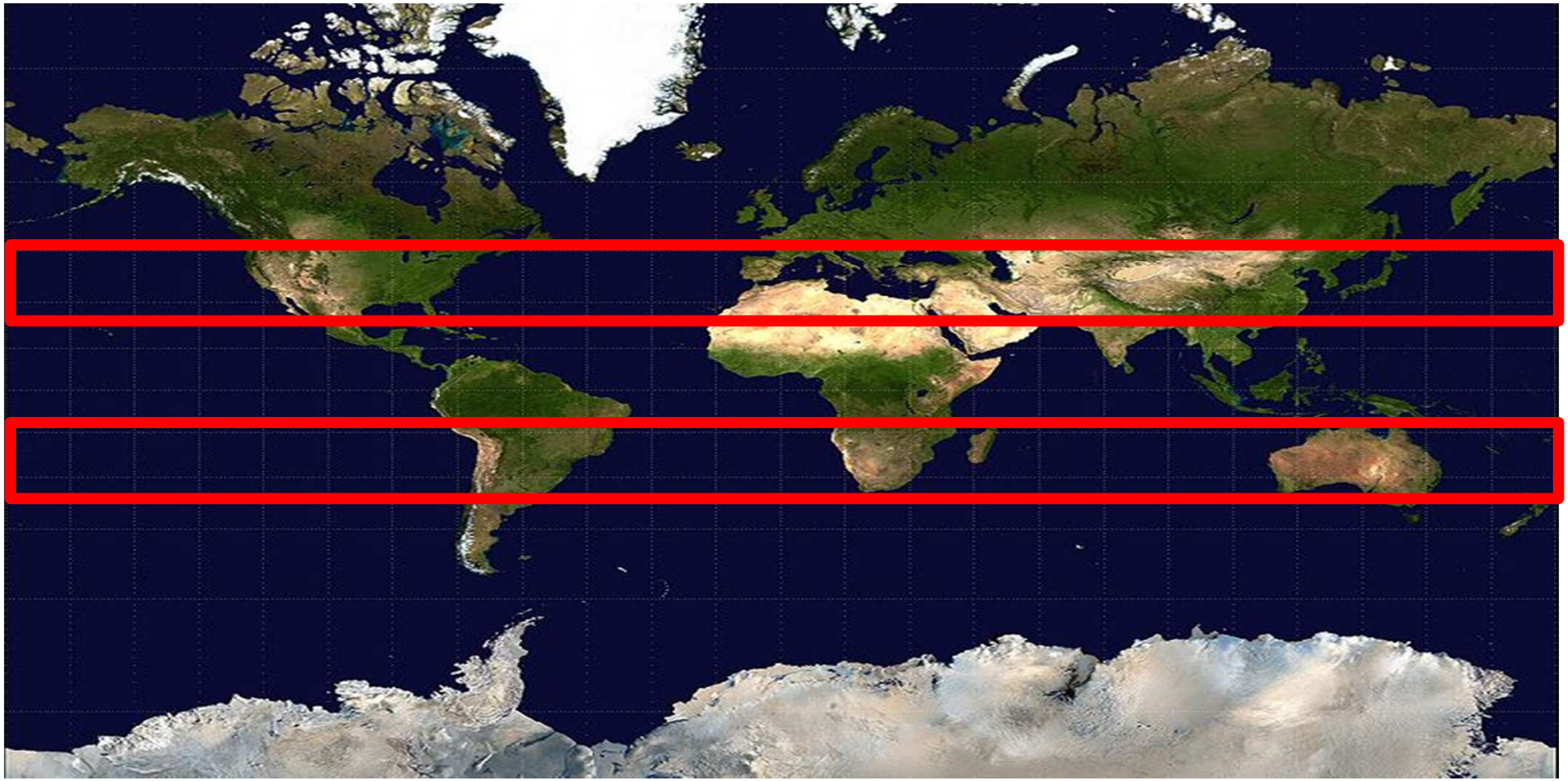
GEA Westfalia Separator Ibérica, SA
Centro de Desarrollo y Competencia para Aceite de Oliva

Universidad de Jaén

# Some business and economy consideration about the word wide olive oil sector

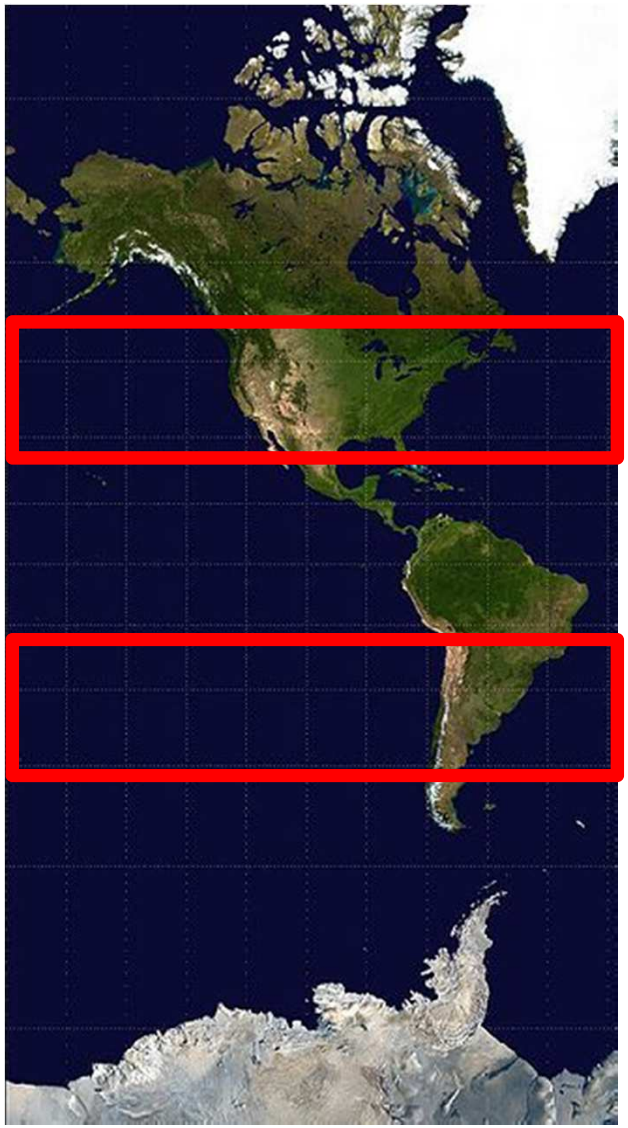
1. Olive oil world wide distribution
2. The special Spanish case
3. Strategias and tools for the difficult future
4. Olive Oil extraction Process. Problems
5. Conclusion

# 1. Olive oil world wide distribution



Until the entry of the crisis each year is earmarked for olive of 150,000 over 300,000 hectares, 35 or 45 million olive trees a year. Portugal and Chile

# 1. Olive oil world wide distribution



**EEUU,** 32 T ha, superintensive, Intensive.

**Méjico**, 12 T ha, superintensive, Intensive.

**Chile**,14 T ha, superintensive e intensive

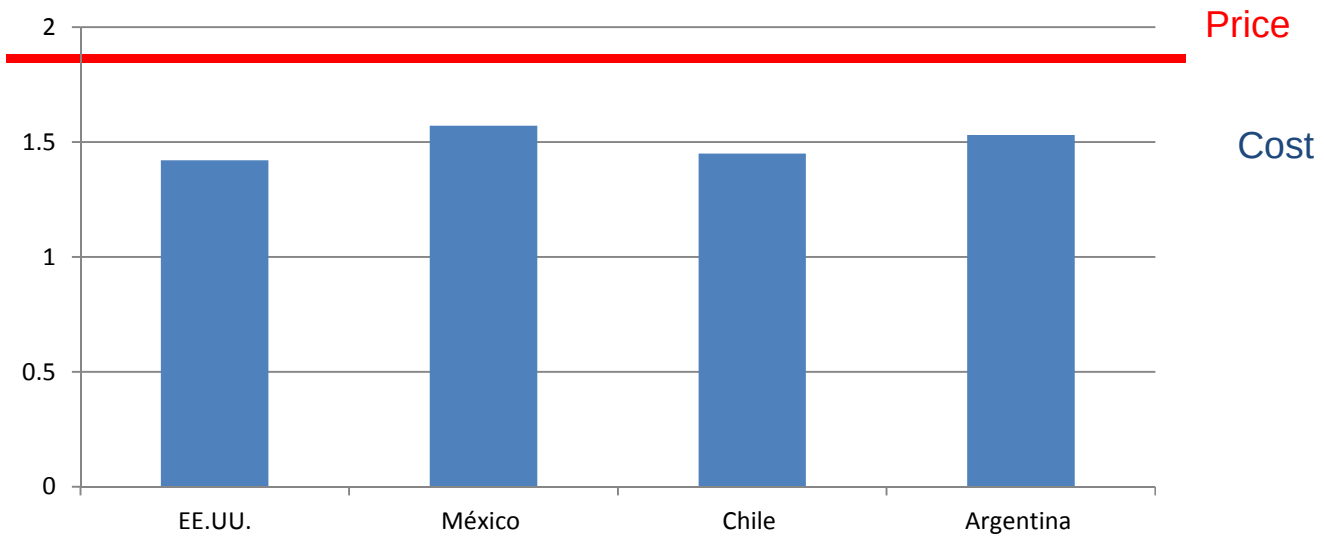
**Argentina**,79 T ha, superintensivo, intensive

**Peru,** 2 T ha.
**Uruguay,** 17 T ha
**Brasil**

# 1. Olive oil world wide distribution

| Continent | Olive trees (units) | Surface (hectáreas) | Production (t) | Consumtion (t) |
|---|---|---|---|---|
| **América** | 37.800.000 | 156.000 | 23.300 | 324.100 |

**In America, the world's olive 1.41% of this 85% is intensive and super. Price-cost analysis and superintensive in terms of average oil prices and grades obtained. Net operating margin between 19 and 21%.**



# 1. Olive oil world wide distribution

**Spain,** 2,5 T de ha, traditional

**Itali,** 1,3 millones ha, traditional

**Greece, 0,**84 T ha, traditional

**Portugal,** 0,76 M ha, superintensive, Intensive, , traditional

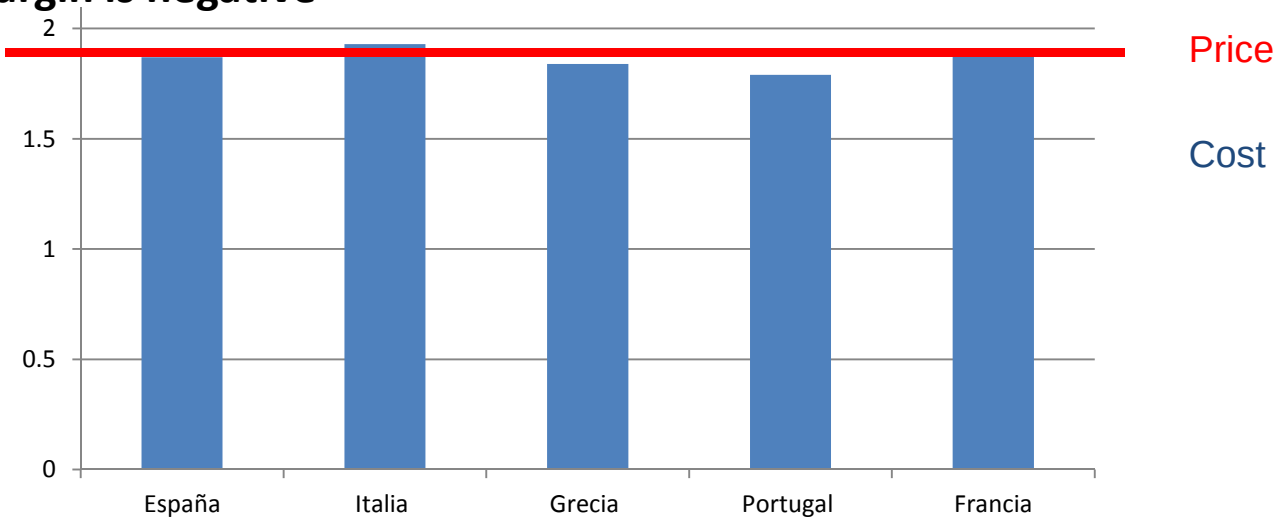
**France,** 12 T ha, superintensive, Intensive.

**Cyprus, Albania, Malta, Montenegro, Serbia and Croatia**

# 1. Olive oil world wide distribution

| Continent | Olive trees (units) | Surface (hectares) | Production (t) | Consumtion (t) |
|---|---|---|---|---|
| **Europe** | 964.400.000 | 6.508.100 | 2.310.600 | 1.893.900 |

**Europe (EU) with 60% of global olive, with more than 80% of traditional olive and marginal. Olive groves and Super Intensive surgical margins of 15 to 17%. Traditional price-cost analysis (average price, and categories), excludes self-employment, mobilized and deployed amortization, financial result and assistance from the PAC. Net operating margin is negative**



# 1. Olive oil world wide distribution

**Tunisia,** 1,7 Million ha, traditional

**Tunisia,** 0,6 millllion ha, traditional

**Libia,** 19 T ha tradiotional

**Egipt,** 3,5 T ha, traditional, intensive

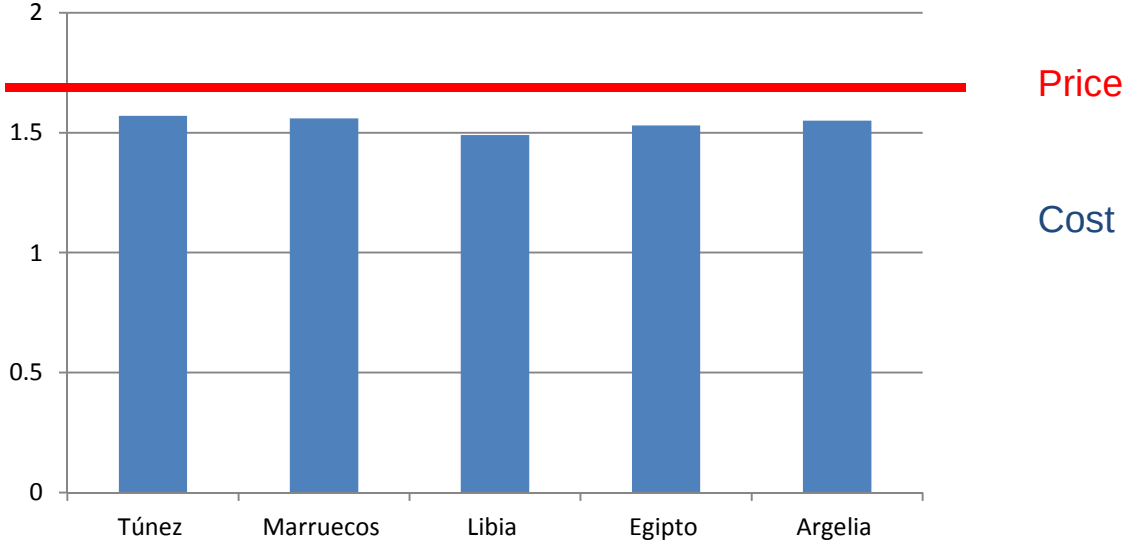
**Argeria,** 471 T ha, traditional

**Southafria y Angola**

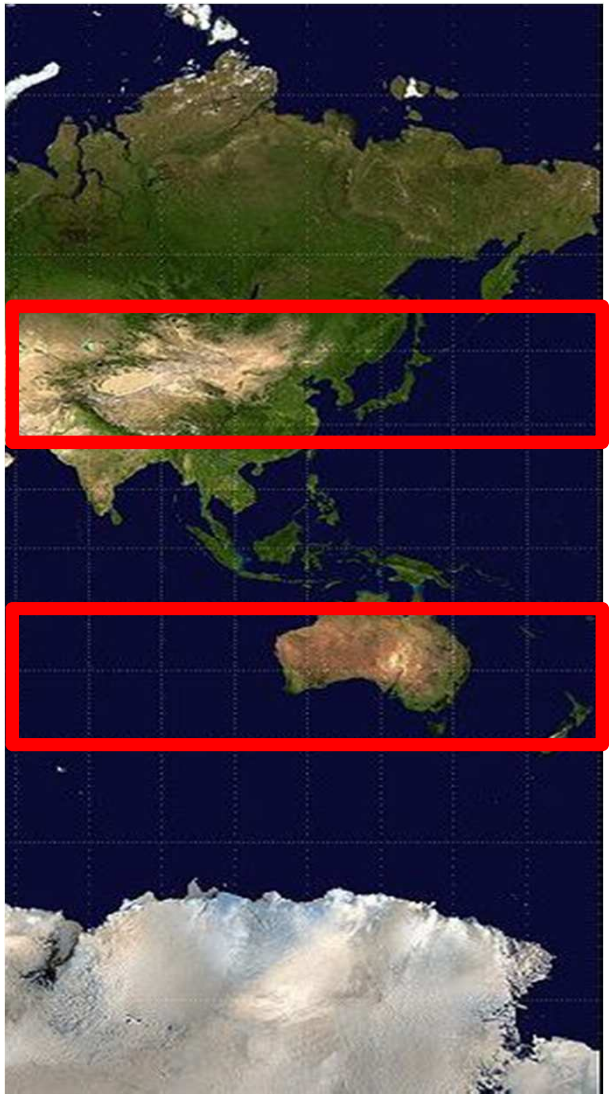
# 1. Olive oil world wide distribution

| Continent | Olive trees (units) | Surface (hectares) | Production (t) | Consuntion (t) |
|---|---|---|---|---|
| **Africa** | 252.500.000 | 2.816.900 | 305.700 | 180.350 |

**Africa with 26% of global olive trees, with more than 90% of traditional olive and marginal. Olive groves and Super Intensive presents margins of between 22 and 40%. Traditional price-cost analysis (considering price and category) exclude self-employment. Net operating margin between 4 and 12%.**



# 1. Olive oil world wide distribution



**Turkey,** 634 T ha, traditional

**Syria,** 480 T ha, traditional

**Jordan,** 107 T ha, traditional

**Israe**l**,** 23 M ha, traditional

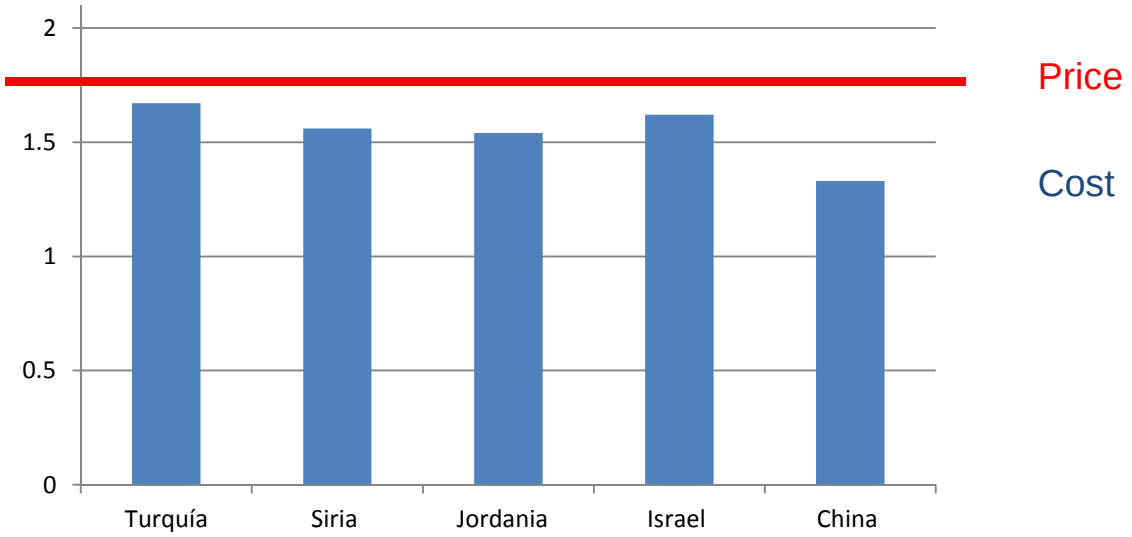
**China,** 62 T ha, traditional

Iran, Iraq, Lebanon, Palestine and Afghanistan

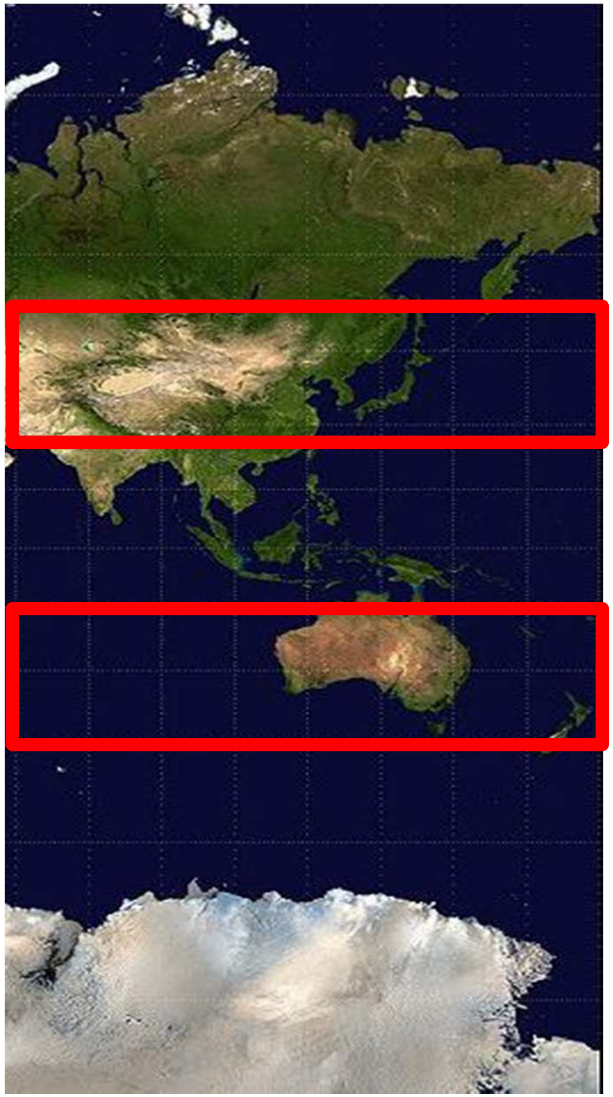
# 1. Olive oil world wide distribution

| Continent | Olive trees (units) | Surface (hectares) | Production (t) | Consuntion (t) |
|---|---|---|---|---|
| **Asia** | 138.300.000 | 1.086.400 | 206.610 | 195.610 |

**Asia with 11% of global olive, with more than 90% of traditional olive and marginal. Olive groves and Super Intensive presents margins of between 26 and 44%. Traditional price-cost analysis (considering price and category) exclude self-employment. Net operating margin between 6 and 19%. If included, mobilized and amortization of fixed assets, and financial costs the result becomes negative**



# 1. Olive oil world wide distribution



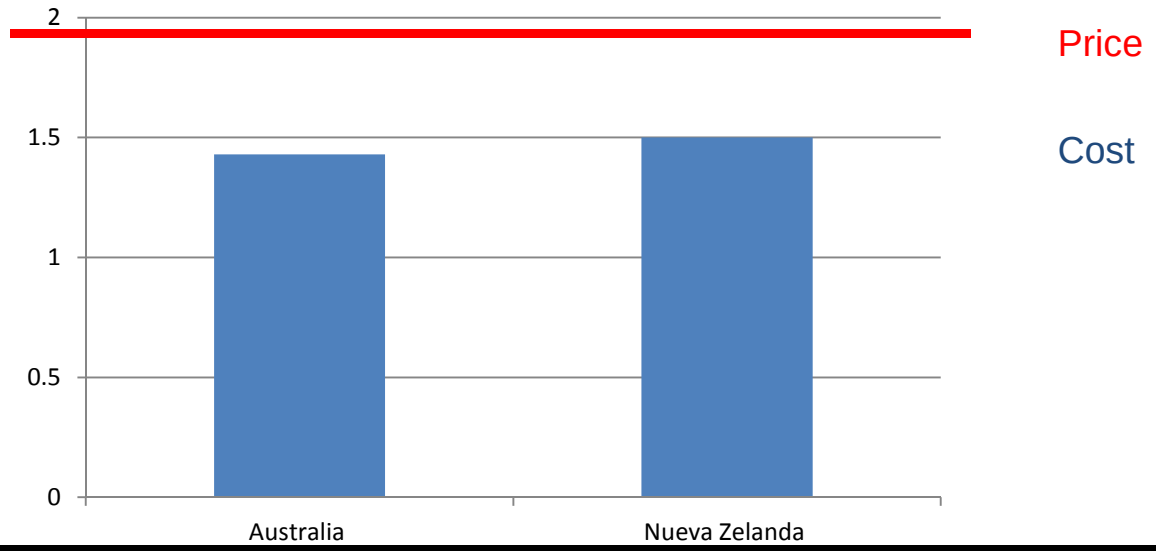
**Australia,** 26 T ha Intensive and Superintensive

**New Zealand,** 2,5 T ha Intensive

# 1. Olive oil world wide distribution

| Continent | Olive trees (units) | Surface (hectares) | Production (t) | Consumtion (t) |
|---|---|---|---|---|
| **Oceania** | 7.000.000 | 28.500 | 20.000 | 42.000 |

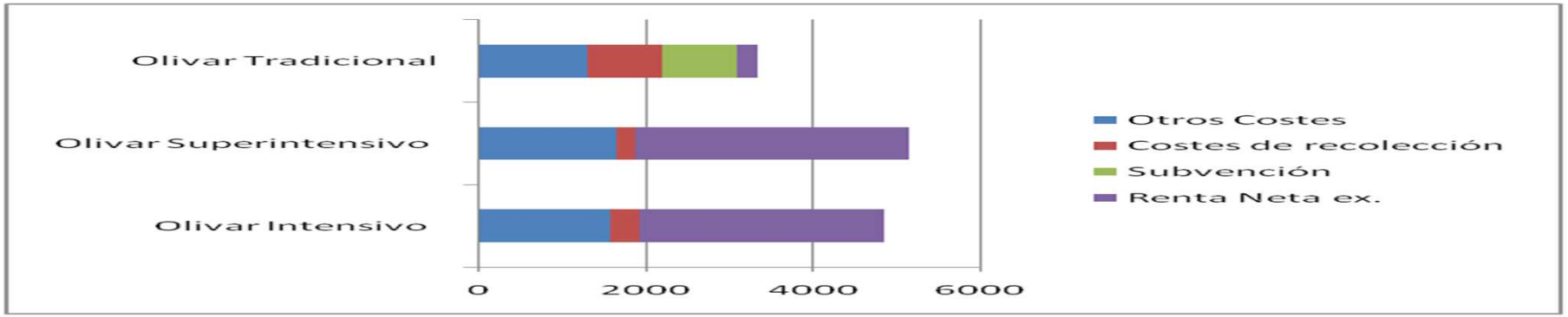
**Oceania 2% of global olive, with more than 100% and super-intensive olive has margins of 22 to 27%. Traditional price-cost analysis (considering price and category) exclude self-employment.**



# 1. Olive oil world wide distribution

| Country | Average production (t) | Average consumtion (t) | Surface (hectares) | Olive trees (millions) |
|---|---|---|---|---|
| **Spain** | 1.064.800 | 563.100 | 2.513.000 | 340 |
| **Italy** | 632.400 | 785.500 | 1.350.000 | 239 |
| **Greece** | 376.600 | 270.000 | 1.230.000 | 178 |
| **Morocco** | 70.800 | 58.800 | 620.000 | 66 |
| **Sirya** | 134.000 | 113.800 | 480.000 | 64 |
| **Tunissia** | 172.000 | 45.500 | 1.745.000 | 140 |
| **Turquey** | 118.800 | 61.800 | 634.000 | 92 |
| **Total** | 2.569.400 | 1.898.500 | 8.572.000 | 1.119 |

# 1. Olive oil world wide distribution




# 1. Olive oil world wide distribution

•At present per capita consumption of olive oil is 417 grams per year, there are 2.9 million tonnes per year like a total production and consuntion.

| **Aceite** | Soja | Algodón | Mani | Girasol | Colza | Palma | Maíz | Oliva | Coco | Animal | **Total** |
|---|---|---|---|---|---|---|---|---|---|---|---|
| **Cantidad** | 34,3 | 4,9 | 4,6 | 10,0 | 16,9 | 34,9 | 2,1 | 2,8 | 3,1 | 25,8 | **139,4** |

•Internationally there are 38 industrial countries are so devoted to growing olives about 11 million hectares (1,400 million olive trees) of which 76% (8 million ha) is marginal and traditional olive, 26% (2.9 million ha ) is olive-intensive, and 1% (0.1 million ha) super intensive

•Of this area of olive trees (removing self-employment, other than operating income, and introducing mobilized and amortization of fixed assets, as well as financial costs), taking into account the current price range, over **75% of global olive obtain a negative net profit** or almost negative (marginal range), by category:

•traditional olive and marginal (normal producers)

*Other categories in difficulty, geographical, climatological, ignorance in the management and cultivation, adapt, and so on. (new producer)

## 2. The special Spanish case

The world leader in olive oil production campaigns averaging between 1.1 to 1,400,000 t, 1735 oil mills and 340 million olive trees


•In Spain, the total area is 2,456,719 ha olive which has distributed roughly into categories:

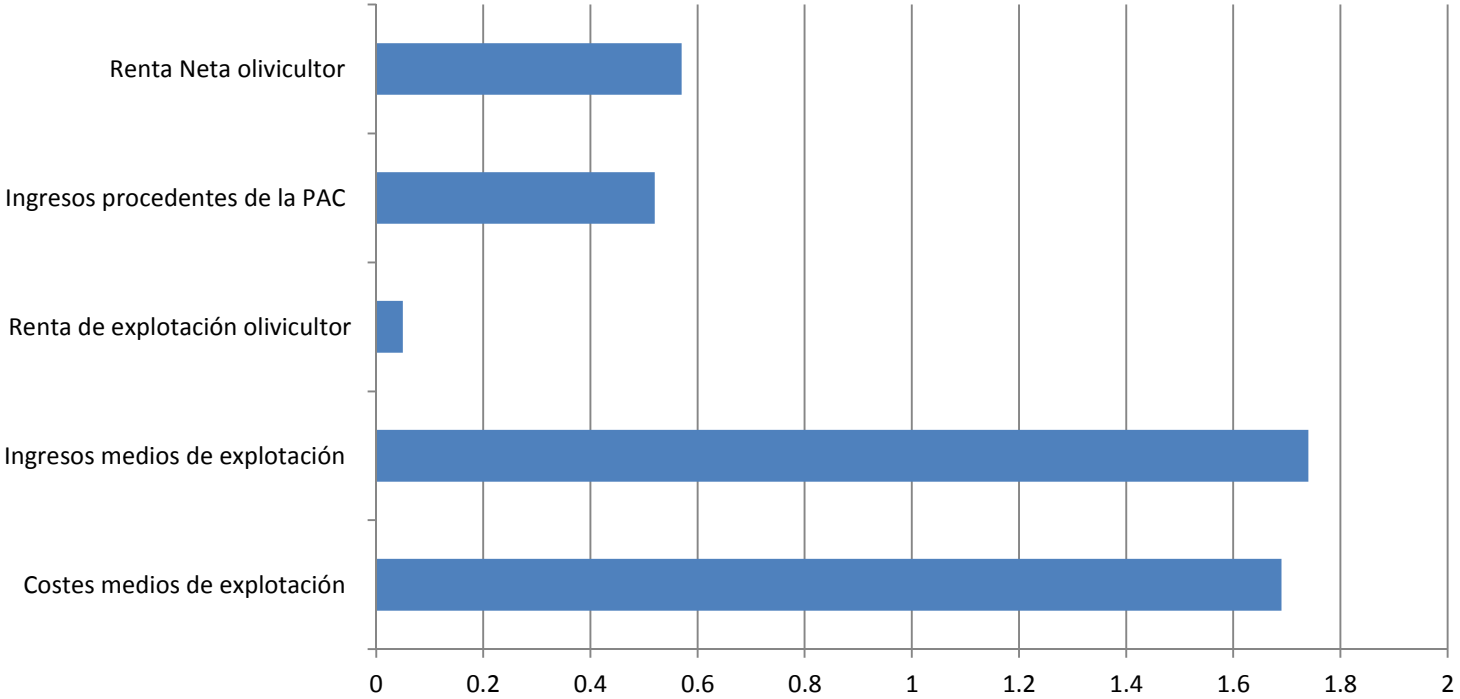
-2% olive superintensive

-25% olive intensive

-73% and marginalizes traditional olive

## 2. The special Spanish case

Given the economic analysis of activity for the most significant and important olive grove, the traditional olive




The most important share from the profit are the subsidies

Fuente : estudio por el grupo GEA, Grupo de investigación TEP 333 Universidad de Jaén, más de 150 explotaciones andaluzas

## 2. The special Spanish case

**- The olive sector is strategic: it supplies agro-based and environmental conservation**

**- Traditional PAC, 1958 achieved self-sufficiency of resources for the EU**

**- Protection mechanisms, justified by economic laws (King, Engel and Turgot) and occur in all advanced economies**

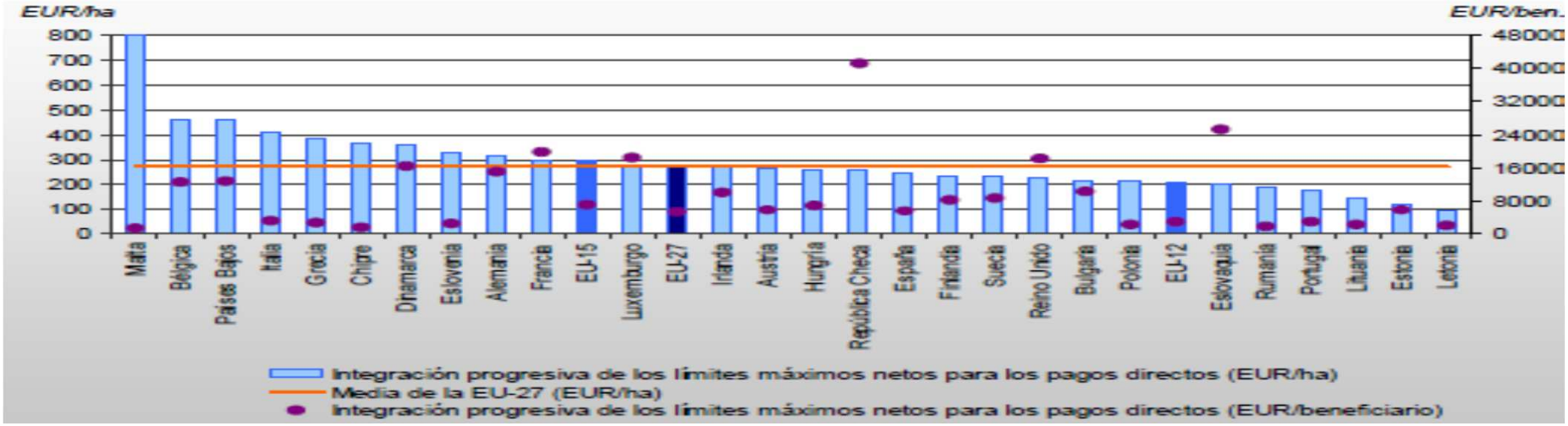
| Ayudas a la agricultura | | | |
|---|---|---|---|
| **2010** | **Millones de euros** | **% del PIB** | **Euros/hectárea agrícola** |
| **UE** | 58.700 | 0,5 | 337 |
| **USA** | 73.276 | 0,9 | 90 |
| **Japan** | 45.481 | 1,4 | 7.468 |
| **Mexico** | 6.070 | 1,3 | 46 |
| **Canada** | 3.964 | 0,7 | 41 |
| **Swiss** | 3.512 | 1,9 | 2.051 |
| **Norwey** | 1.793 | 1,4 | 1.604 |

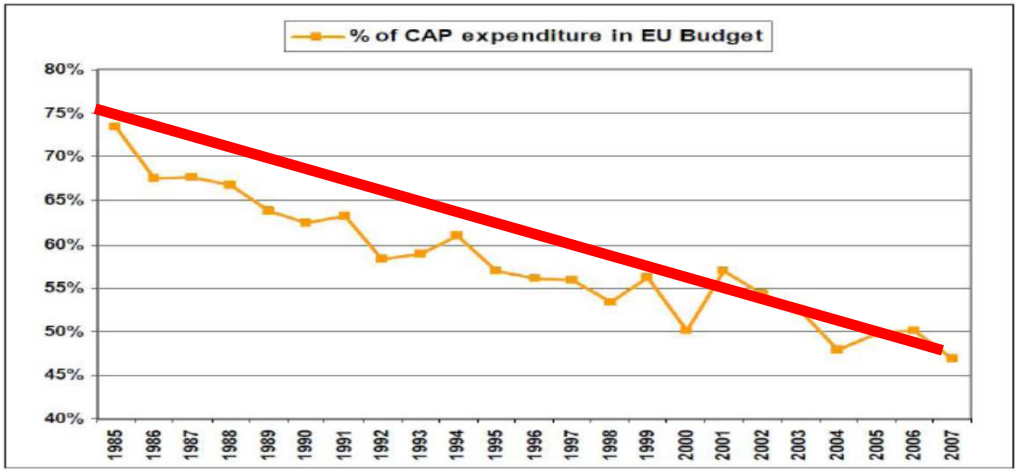
**-1992, grew 17% FEOGA year, 75 - 80% of the budget, 80% on 20% of farms**

**- Harsh attacks from the U.S., and financial and business problems**

**-Increase agricultural competitiveness, stabilize production, environmental improvement**

## 2. The special Spanish case

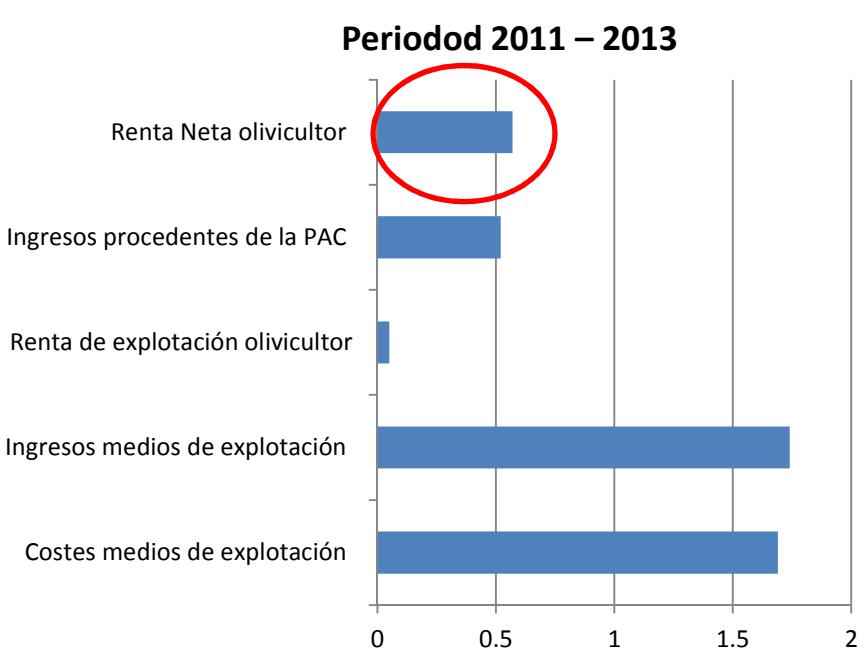


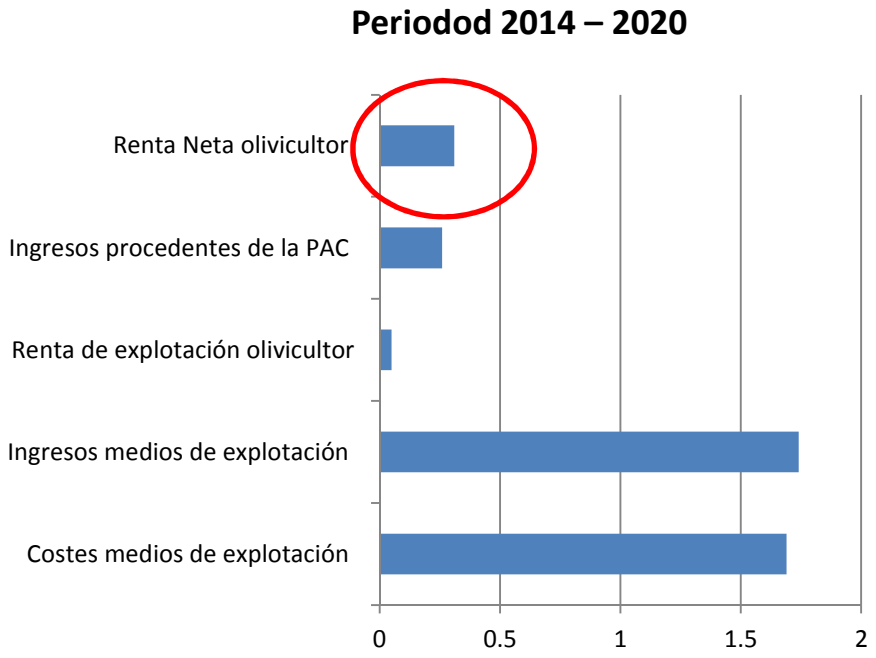




The subsidies will continue ibetween the periodod 2103 and 2020 from UE 371 Euros / ha, to, 300€,

## 2. The special Spanish case

The subsidies will be keeped in Portugal, Spain, Greece, Italy, and all the UE countries from 2013 to 2020. what does mean, se the below figures



# 3. Strategies and tools for the difficult future

Now the olive oil sector it is a crisis secotr, due that we need to craete or to work according with some estrategies or tools:

1. To change the olive tree estructure in the field
2. Quality and food security
3. Competitiveness
4. Vertical and horizontal integration
5. Offer concentration
6. Promotion

## 3. Strategies and tools for the difficult future

1. To change the olive tree estructure in the field

**Change the traditional gronw to intensive or superintensive, choose the real good varieties, change the sun orientation, etc.**

# 3. Strategies and tools for the difficult future

2. Quality and security food

**<u>Quality</u>, it is a long term strategy, and it need an always need external validation (awards, prices, etc.) however , it is necessary if you want to compete in the current And competitive global market.**


**<u>Security food,</u> has a importance, not only for the single olive oil plant or farmer, if in a single olive oil plant appear a food safety problem, it could be a catastrophe, not only for this olive oil plant, region or country, can affect to the hall sector. Due that it is so important.**

# 3. Strategies and tools for the difficult future

## 3. Competitiveness

**<u>Competitiveness</u>, you have to save as much money as you can, it is important to achieve the scale economy rules: no a tractor for everybody, no a olive oil plant for everybody, etc. there is two alternatives:**

**Work throw a services company**

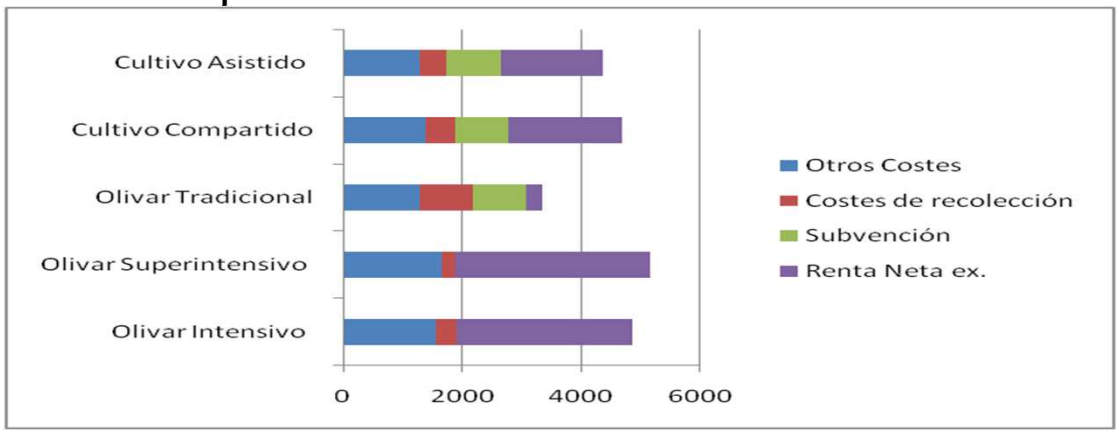
**Or**

**Work together like in a cooperative.**

**In the both case you will save money, and of course you will increase your profitability**

# 3. Strategies and tools for the difficult future

## 3. Competitiveness




| Strategy | Net profit | Collecting costs |
|---|---|---|
| ***Olivar traditional*** | 1.179,57 | 967,08 |
| ***Service company*** | 1.823,81 | 495,12 |
| ***Cooperative*** | 1.875,97 | 472,57 |

# 3. Strategies and tools for the difficult future

Universidad de Jaén

GEA Westfalia Separator Ibérica, SA
Centro de Desarrollo y Competencia para Aceite de Oliva

## Offer concentration, vertical and horizontal integration

2002, 25 groups has a 65% market share about of the 528 millions (internal demand) price: 4,11 euro

AOP Ibérica | Elosua | Minerva | Sovena | Koipe | Ybarra | Carbonell,
Bertolli | MIGASA | Caprabo | Olilán | Eruski | Salgado | Aceites Coosur | Urzante
Guillén | Aceites del Sur | Carapelli | Mueloliva | Agribética | Hojiblanca | La Masía

2008, 10 groups has a 65% market share about of the 566 millions (internal demand) price 1,86 euros

Koipe, Carbonell, Elosua, Carapelli, Minerva y Bertolli

La Masía, MIGASA, Ybarra, Mueloliva y Salgado

Aceites del Sur, Guillén, y Coosur

Sovena y Agribética

Urzante

Hojiblanca

Caprabo, Olilán y Eruski

# 3. Strategies and tools for the difficult future

Universidad de Jaén

GEA Westfalia Separator Ibérica, SA
Centro de Desarrollo y Competencia para Aceite de Oliva

1.400.000.000 Kg olive oil

350.000.000 olive trees

2.500.000 olive hectares

530.000 olive farmers

1.735 olive oil plant

10 companies buy olive oil to sale again, 65% market

5 big supermarkets

The price fell down 40%

**Spanish Olive sector arrive to the bankruptcy**

# 3. Strategies and tools for the difficult future

## 4. Offer concentration, vertical and horizontal integration

In Spain there are more than 1.000 cooperatives or syndicates, due that each cooperative has between 100 and 2.000 olive farmers, in order to have a common olive oil plant (to reduce cost), have a common olive trade mark (it is easy to promote, to negotiate with customer and suppliers, to achieve Scale Economy rules, etc.), to have a skill full professional team (chemistry, Engineer, economist, etc.)

In Spain the cooperative sector has a 60% of the national share market good examples **Hojiblanca more than 50 T farmers** or **OleoEstepa 4 T farmers**

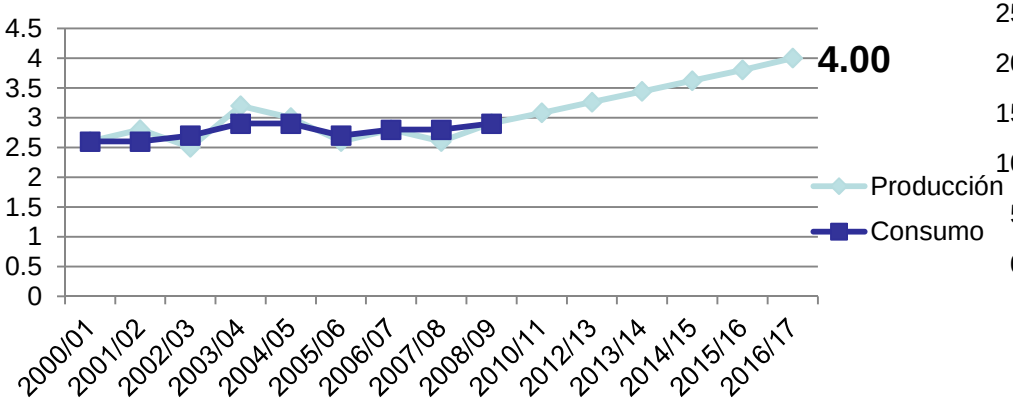

# 3. Strategies and tools for the difficult future

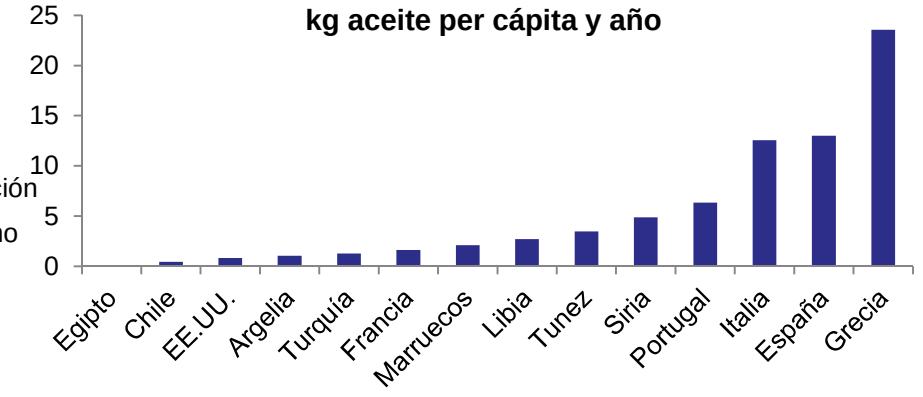
## 6. Promotion

Currently the sector is a sector in equilibrium from the market point of view. The promotion is considered a strategy of such importance to the sector, which produced a decrease, or containment of consumption.

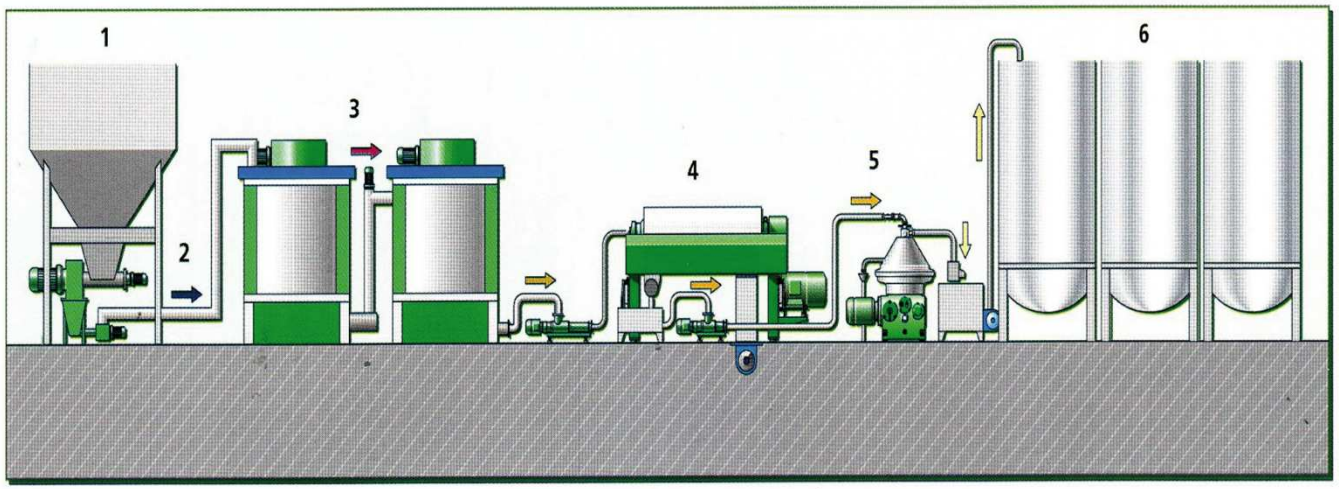
**Olive oil prevents cancer and heart failure, olive oil extends the life**

Therefore, promoting the consumption of olive oil not only in emerging economies, but the rest of the world is particularly vital and important in order to perpetuate and ensure the future of the olive oil sector.



## 4. Olive Oil extraction Process. Problems




**WS IBÉRICA-CDCAO**

**Center for the Development and Competence for Olive Oil**

**“Olive oil Know How”**

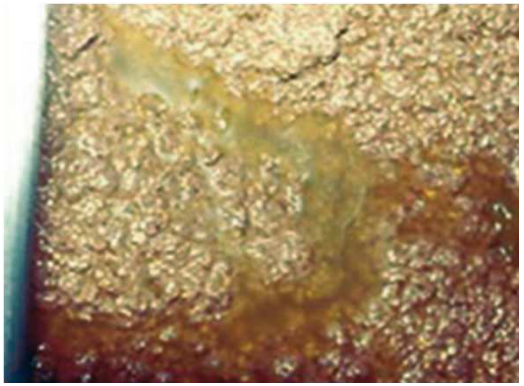
# 4. Olive Oil extraction Process. Problems

## metal hammer crusher

**This process is carried out in the preparation of the paste; is called "milling" 3.000 R.P.M. and its aim is to break down the vegetable structure of the olives, in order to free droplets of oil present inside the cells that constitute the oily parenchyma of the mesocarp of the olive fruit**

**In general, the sizes of the sieves are chosen by the technical manager of the oil mill, starting the campaign with a 5mm sieve and ending between 6 and 7mm, depending on fruit constitution**

# 4. Olive Oil extraction Process. Problems

## Malaxer

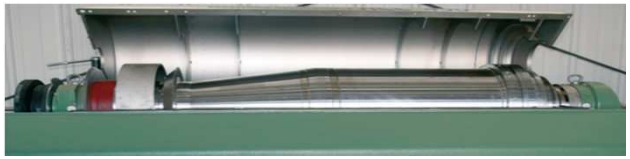
**The malaxer machine is a device made up of a container thermo-regulated by a heating chamber which is usually located on the outer wall of the container. Hot water coming from the secondary circuit of the general heating boiler circulates through the heating chamber in question.**

**Inside the container there are several axis with pallets with a fixed speed between 20 and 30 rpm.**

**Periodod of time from 1,5 to 2 hours**

# 4. Olive Oil extraction Process. Problems

**The decanter works between 3.000 and 3.500 r.p.m. and it has to separate the liquids from the solids in a continue process, there are two tipes, 3 phases, it separate between water, olive oil and pomace, and two phases, only separate pomace, and water mixed with oil**



# 4. Olive Oil extraction Process. Problems

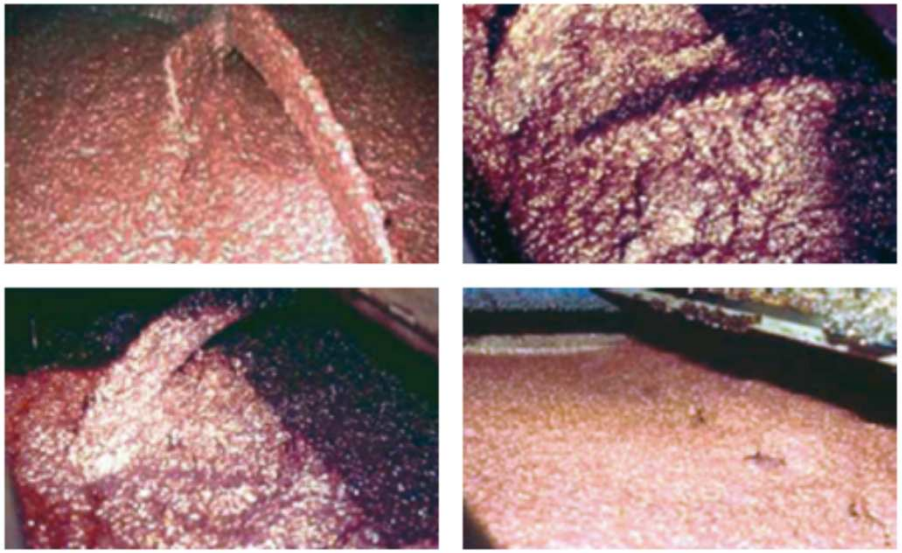
## Vibrating screen

**After finishing the separation solid – liquid, there are still some solids inside the olive oil mixed with water, in order to avoid future process of fermentation and oxidation this liquid have to firstly go through a vibrating screen with a 1,25 mm drilled sheet to catch these solid particles before liquid separation**

# 4. Olive Oil extraction Process. Problems

**After finishing the separation solid – liquid, the liquid phase has to be separate between olive and water, this process has done by a vertical separator**

# 4. Olive Oil extraction Process. Problems



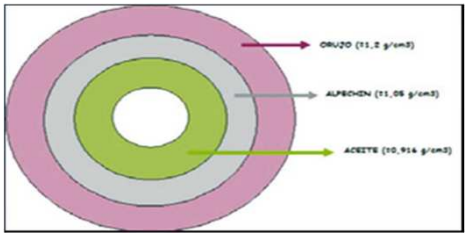
**It will optimize the duration and temperature range of malaxing, looking for the best ratio between quality and quantity.**

**- will be adapted by assigning the most appropriate of the diaphragm and addition of water,**

**- ¾ contribution of talc, or other adjuvant if necessary.**

**- Adequacy of working capacity horizontal centrifuge according to the status and content of the dough, to nominal.**

**In the event that the olive comes with excessive moisture, or the right thing also difficult pastes will be:**



**-increase the temperature,**

**-increase the malaxing period,**

**-regulate the decanter if it has two motors,**

**-wait between the olive fruit collecting and the extraction about 20 hours (lose humidity),**

**- or combined coadjuvants (talc, calcium carbonate, and enzymes)**

# 4. Olive Oil extraction Process. Problems

These pictures belong to the three biggest olive oil mills of Westfalia Separator.
WSIB installed and provides maintenance to 4 of the 5 biggest olive oil mills around the word, more than 47.000.000 kg /each season.

# 5. Conclusión


**In an adversarial context of globalization as it is today, this pricing environment and where 38 countries produce olive oil, we have no choice that urgently devise and implement strategies for:**

**-quality,**

**- competitiveness (restructuring, cooperation and service companies),**

**- agri-food security,**

**- integration, concentration and cooperation.**

**- promotion,**

**Otherwise the situation could become of no return**

Olives New Zealand

**Olives New Zealand**
**AGM - Field Walk - Awards Dinner**
**Saturday the 15th of October**

GEA Westfalia Separator NZ Ltd.

# THANK YOU VERY MUCH FOR YOUR ATTENTION

Universidad de Jaén

GEA Westfalia Separator Ibérica, SA
Centro de Desarrollo y Competencia para Aceite de Oliva