# **116**<sup>2016</sup>

# **CONEWS** OF SUSTAINABILITY

"Discover the Oceans" competition Pulses and Sustainability IFAD supports food safety in Africa

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# FOREWORD

## **International Year of Pulses**

The 68th Session of the United Nations General Assembly declared 2016 as the International Year of Pulses, aiming to raise awareness of the potential significance of these foods in promoting health, nutrition, and food security and environmental sustainability.

FAO, the Food and Agriculture Organization of the United Nations, was appointed responsible for the celebration of this thematic International Year, in collaboration with UNESCO, Member States, non-governmental organizations and other stakeholders.

According to the World Health Organization (WHO), every year 3.9 million children die from malnutrition. Thus, the International Year of Pulses arises as an opportunity to increase awareness about the contribution of pulses, taking into account its nutritious advantages, derived from its high protein content.

The International Year of Pulses will also focus on discussing matters related with production and environmental sustainability as one of the Millennium Development Goals through the sustainable management and use of natural resources.

In short, in what concerns food security, FAO has two main objectives "to help eliminate hunger, food insecurity and malnutrition" and "make agriculture more productive."



Food and Agriculture Organization of the United Nations





fao.org/pulses-2016

# SUSTAINABLE NEWS

"Discover the Oceans" competition Descobrir os Oceanos

The "Discover the Oceans" project is a co--financed initiative by the european fund EEA Grants, and is developed under the fund's PTO2 program - Integrated Management of Sea Water and Coastal, which aims to raise awareness and knowledge about marine issues through awareness raising actions and training in integrated marine management. In the framework of the project, a competition is being developed, aiming to challenge Portuguese students up to the High School level to develop and submit stories and scripts which incorporate at least one of the seven principles of ocean literacy, contributing to the promotion of awareness, education, and training on integrated management of the marine environment.

Participants may submit their stories and scripts to:

oceanos@formatoverde.pt

After receiving the e-mails, the four best scripts will be selected and rewarded with its transformation into a comic book, illustrated by national and international artists.

Winners will be announced on social networks:

facebook.com/descobrirosoceanos and twitter.com/descobriroceano.

The project is promoted by Formato Verde, with the support of several partner organizations, including ABAE, ALGAR, LIPOR, SMSBVC, ICPAS, Fórum Oceano, as well as the Maia and Matosinhos' Municipalities.

Descobrir os Oceanos



©FAO, 2015

# First tender notice for the Waste sector completed

POSEUR - Operational Programme for Sustainability and Efficient Use of Resources - is one of 16 programs designed for the operationalization of the Portugal 2020 Strategy for the dispersion of Structural Investment European Funds 2014-2020, under which Portugal can receive 25 billion Euros by 2020. POSEUR intends to contribute to the priority of sustainable growth, responding to the challenges of transitioning to a low carbon economy, based on a more efficient use of resources and promoting greater resilience to climate risks and disasters. One of its three priority areas of action, the Axis III "Protecting the environment and promoting resource efficiency", comprises a total allocation of 1.045 million Euros. 306 million of which are reserved to the waste sector.

The first tender notice for the waste sector ended on January 29th, taking a co-financing amount of 90 million Euros as indicative allocation. Eligible investments are intended to promote multimaterial recycling and the recovery of municipal waste.

According to information from the Minister of Environment, a total of 97 projects were presented, corresponding to a total investment amount of about 170 million Euros. Submitted applications encompass a wide variety of projects, such as selective collection projects, containment units, preparation and treatment of municipal waste, optimization of multilateral selective collection, mechanical treatment units and biological and preparation of municipal waste for composting.

In the framework of this notice, Formato Verde accompanied and assisted several applications, for a total amount of investment of about 24 million Euros - equivalent to 14% of the global applications.

The projects contribute to the accomplishment of waste management targets set in PERSU 2020, namely planned increases in the waste preparation rate for reuse and recycling to 50%, decreasing the deposition of biodegradable waste to 35% (relative to 1995) and ensuring levels of recovery originating from selective collection reach 47 kg per capita by 2020.

The target audience for this notice are managing bodies of municipal waste, such as municipalities and municipal, inter-municipal and multi-municipal entities responsible for the management of municipal waste produced in their area of intervention.

According to the published news, applications will be evaluated in good time so that part of the investments can be realized in the second half of 2016. According to the schedule program released by the Management Authority, 2016 includes the opening of two new tender notices for the sector of waste, destined for continental Portugal: March and August 2016.

#### POSEUR



# Eco-Schools Seminar in Leiria

#### Eco Escolas

Leiria received the National Eco-Schools Seminar of 2016, promoted by the European Blue Flag Association (ABAE). The event brought together about 350 professionals linked to environmental education, including teachers, municipal technicians and representatives of non-governmental organizations, to discuss issues such as organic farming, sea, sustainable mobility and healthy eating. The seminar also enabled participants to share objectives, exchange experiences and disseminate good practices.



Several presentations were held during the event, focusing mainly on education for sustainable development and presented by organizations who focus on this field. The event's programme also featured practical workshops on topics such as water, biodiversity, organic farming and food security.

Parallel to the event's extensive and diverse program, an exhibition of works developed by Eco-Schools was held, as well as an Eco-Show, which allowed many partners of the Programme and other relevant entities to demonstrate its main activities.

#### <u>ABAE</u>



## **ICEGOV** Conference

ICEGOV

1000 созмански сомени 2016 монтрукто 01 - 03 макси 2016

CONFERENCE THEME

Transparent and Accountable Governance for 2030 Sustainable Development Agenda



The United Nations University Operating Unit on Policy-Driven Electronic Governance (UNU-EGOV) in partnership with AGESIC. UNESCO and the Presidency of Uruquay, promoted the ICEGOV2016 conference - International Conferences on Theory and Practice of Electronic Governance, which took place between March 1st and 3rd in Montevideo. Uruquav. Like the previous editions, the conference aimed to bring together researchers, policy makers, international officials, business leaders and civil society, in order to discuss how digital technology can help address issues related to transparency and responsibility of the institutions in response to the population's needs, supporting collaboration between governments and citizens to fight inequalities and promote social inclusion.

These conferences aim to promote interaction between different groups of stakeholders in order to reinforce the concept that it's possible to create public value by investing in Information and Communication Technologies (ICT) and electronic governance. The ICEGOV conference series was created to facilitate these interactions, to help start and maintain cross-border relations, and to contribute to the development of the global community E-GOV that unites the worlds of research and policy.

**ICEGOV** 

# DID YOU KNOW THAT...

The production of pulses is very efficient in terms of water consumption, especially when compared to other protein sources. Its small water footprint makes the production of legumes a smart choice in drought-prone areas.

FAO

## GGGI validates Annual Workplan on a workshop in Ethiopia

Global Green Growth Institute

On February 26<sup>th</sup>, the Global Green Growth Institute (GGGI) and the Government of Ethiopia (GoE) held a validation workshop of the Country Planning Framework (CPF) and Annual Workplan of the GGGI, Ethiopia Program. The workshop aimed to prove that the Country Planning Framework is aligned with the defined objectives and targets for Ethiopia, including the goal of achieving middle-income country status by 2025.

GGGI established this partnership with the Government of Ethiopia for the purpose of developing a climate resilience and green economy Framework, while at the same time providing guidance to the sector for the successful integration of the Climate Resilient Green Economy Strategy into the second phase of Ethiopia's Growth and Transformation Plan (GTP II). GGGI





## **HIGHLIGHT PUB**

The "Discover the Oceans" project encompasses the creation of a collaborative comic book, with scripts created by students from the 1st grade to High School. All students from Portugal are therefore invited to submit creative and original scripts and stories that approach at least one of the 7 Ocean Literacy Principles. Scripts should be sent to the email address:

oceanos@formatoverde.pt

The 4 best scripts will be selected by a jury and adapted for a comic book, illustrated by national and international artists. The book will be published in print and digital version.

The competition is being held and promoted through social networks: <u>facebook.com/descobrirosoceanos</u> and

<u>twitter.com/descobriroceano</u> where participants can access the competition rules.

# ARTICLE

## Pulses and Sustainability



FAO, the Food and Agriculture Organization of the United Nations, declared 2016 as the International Year of Pulses. Pulses are foods such as peas, beans, lentils and others, frequently consumed by mankind (not only used for animal feed). Pulses are a vital source of vegetable proteins and amino acids and should be consumed as part of a healthy diet, helping to prevent and help control diseases like diabetes, heart disease and cancer. However, pulses are also environmentally beneficial, contributing to greater sustainability at different levels, particularly in land use.

Pulses are part of crop rotations which farmers can use to maintain soil fertility. Pulses have nitrogen fixing properties, which helps increase soil fertility. By fixing nitrogen in the soil, pulses help reduce the footprint of other cultures. Thus, the benefits extend throughout the food production cycle.

Moreover, pulses have a positive direct impact on the quality of soil, since it helps to feed the soil's microorganisms. It was also shown that pulses produce greater quantities and different types of amino acids that other types of crops, and leguminous residues left after harvest have a different biochemical composition from other plant waste.

This diversity in soil composition comes from a good rotation of pulses, which helps other crops grow and offers greater protection against bacteria and fungi that cause disease.

Pulses also are a source of protein with a low footprint, regarding both carbon and water. The water footprint associated with the production of one kilogram of beef, pork, chicken and soy is respectively 43, 18, 11, and 5 times higher than the water footprint associated with the production of 1 kg of pulses. In what concerns the carbon footprint, the production of pulses represents less emissions than most sources of animal protein. Producing 1kg of pulses emits only 0.5 kg of  $CO_2$  equivalent, while the production of 1 kg of CO<sub>2</sub> equivalent.

The benefits of pulses are, thus, diverse and crosscutting in the whole food system. Throughout 2016, several FAO initiatives are expected, with the goal of informing, raising awareness and enhancing all the benefits associated with pulses, both in terms of nutrition and sustainability. One of these initiatives will take place between April 18th and 20th in Morocco, with the holding of the International Conference on Pulses in Health, Nutrition and Sustainable Agriculture in Dry Territories.

International Year of Pulses



# CURRENT EVENTS

# IFAD supports food security in Africa

**Global Environment Facility** 

The International Fund for Agricultural Development (IFAD) held its 39th meeting of the Board of Directors on February 17th and 18th, at the organization's headquarters in Rome, Italy.

The meeting of the Council, IFAD's main decision-making body, focused on the role of investment included in the post-2015 agenda. More specifically, on how to explore ways to increase investment in family agriculture, essential to achieving the overall objectives of eradicating poverty and hunger.



End hunger, achieve food security and improved nutrition and promote stainable agriculture

In his opening speech, the President of IFAD, Kanayo F. Nwanze, said we face the very real risk of witnessing setbacks in relation to the developments achieved in the context of reducing poverty and hunger in recent years. He added that the Agenda 2030 - the 17 new Sustainable Development Goals - calls for the creation of prosperity, health and safety for everyone, while at the same time promoting the protection of the planet in the next 15 years.

According to IFAD, about 3 billion people live in the rural areas of developing countries. They represent about 40% of the world's population, but, at the same time, represent over 70% of the world's poor and hungry. Most depend on agriculture for their livelihoods. IFAD stresses that it is essential to focus attention on the poor populations from rural areas, particularly smallholders, to achieve Sustainable Development Goals 1 and 2 - end poverty and end hunger, respectively.

Global Environment Facility

## Study confirms that ocean acidification slows growth of reefs

Carnegie Science

A team of scientists from Washington's Carnegie Institution for Science, conducted the first experiment that manipulated the chemistry of seawater in a natural community of coral reefs, in order to determine the effects that carbon dioxide excess released by human activity might be having on coral reefs.

The results of the experiment provide evidence that ocean acidification is already slowing the growth of coral reefs. The team manipulated the alkalinity of sea water flowing over a reef located south of the Great Barrier Reef. Scientists manipulated the pH of the water on the reef in order for it to get closer to what it would be in the pre-industrial period, based on estimates regarding carbon dioxide in the atmosphere at the time.

They subsequently evaluated the calcification of the reef in response to this increase in pH. Thus, scientists found that calcification rates in these artificially created pre-industrial conditions would be larger than they are today. The team's work was published in Nature.



About a quarter of anthropogenic carbon dioxide emitted annually into the atmosphere is absorbed by the oceans, causing significant declines in ocean surface pH, the concentration of carbonate ions and saturation state of carbonate minerals. This process, known as ocean acidification, represents a major threat to marine ecosystems, especially for corals. Coral reefs are particularly vulnerable to the ocean acidification process, because reefs are built by the excretion of calcium carbonate, a process called calcification, which becomes increasingly more difficult as the acid concentration increases and the pH

of surrounding water decreases. Carnegie Science

# UNICEF publishes new report

UNICEF

Humanitarian action is the core of UNI-CEF's activity, and it includes effective preparedness, response and early recovery to save lives and protect the rights of children around the world. The latest report on humanitarian actions in favor of children, Humanitarian Action for Children 2016, compiles some of the joint efforts of UNICEF and its partners, as well as the results achieved in 2015 for children in need of humanitarian assistance, and a preview of the necessary efforts for subsequent years.



In 2015, the scale and number of natural disasters and violent conflicts continued to have a significant impact on millions of children and their families. The continuing crisis in the Central African Republic, Irag, Syria and neighboring countries; the worsening situation in Nigeria, South Sudan and Yemen; the new refugee crisis in Europe, Burundi and neighboring countries; as well as natural disasters in Nepal, the Pacific Islands and other parts of the world, all placed additional burden on UNICEF's already urgent interventions. In 2015, UNICEF has vaccinated 11.3 million children against measles, treated 2 million children with acute malnutrition, provided access to formal and non-formal basic education to 4 million children, and helped more than 22 million people have access to safe water.

For 2016, UNICEF is counting on the continued support of donors to perpetuate their efforts in promoting safety and improving the quality of life of children around the world.

<u>UNICEF</u>

## Morocco inaugurates largest solar plant in the world

#### The Guardian

Morocco recently inaugurated the first phase of a solar energy plant that, when completed, will become the world's largest. The power station, located on the edge of the Sahara desert, will be the size of the moroccan capital once it is completed in 2018. It will have the ability to supply electricity to 1.1 million people.

Noor 1, the plant's first section on Ouarzazate, will provide 160 megawatts (MW) of the 580 MW of final capacity, helping Morocco prevent hundreds of thousands of tons of carbon emissions per year. Morocco estimates to generate 42% of its energy from renewable sources by 2020. The country hopes to use the next UN conference on climate change, which it will host in November, as a starting point for an even more ambitious plan that includes generating 52% of its energy from renewable sources by 2030.





19th Ordinary Meeting of the Contracting Parties to the Barcelona Convention and its Protocols

UNEP



Athens received the 19th Ordinary Meeting of the Contracting Parties to the Barcelona Convention and its Protocols, which took place between February 9th and 12th. More than 150 delegates from 21 Mediterranean countries and the European Union, all parties to the Barcelona Convention, met to discuss and adopt strategies for the entire Mediterranean basin. Among these, the Mediterranean Strategy for Sustainable Development 2016-2025, the medium-term strategy of the Mediterranean Action Plan (MAP) for the coming 6 years, other key action plans in the areas of offshore, pollution,

biodiversity, coastal zone management and climate change adaptation. The meeting was opened by Prof. Mehmet Birpinar, Chairman of the Barcelona Convention, who, in his speech, highlighted the achievements made during the two years of Turkey's presidency. Highlighting the improvement in the status of compliance of countries, Mehmet Birpinar stressed that further progress is needed in this area. In turn, Achim Steiner, Executive Director of the United Nations Environment Programme (UNEP), addressed the participants by highlighting the positive record of the Barcelona Convention as the only legally binding instrument that addresses the management of the single Mediterranean ecosystem. Steiner emphasized that 2015 set a new trend with the adoption of the Sustainable Development Goals and the decisions of the Paris Summit, confirming that the Barcelona Convention will have a key role in achieving these objectives in the Mediterranean.

<u>UNEP</u>

## Renascimento company receives WEEELABEX certification

Renascimento



The Renascimento company, focused on the management and recycling of waste, has recently obtained one of the most important certifications at European level in the treatment of WEEE - the WEEELABEX Excellence certification for the treatment and recycling of waste electrical and electronic equipment. Renascimento is thus the first national operator to achieve this recognition.

Renascimento holds three specialized units to treat the flow of Waste Electrical and Electronic Equipment (WEEE) located in the districts of Lisbon, Aveiro and Faro. These units are licensed and certified to receive and execute the various stages of treatment of such waste. <u>Renascimento</u>

NOCTULA promotes conference focused on Environmental Responsibility NOCTULA



# CONFERÊNCIA RESPONSABILIDADE AMBIENTAL

On May 11th, the auditorium of Viseu's Technology and Management Superior School will receive a dedicated conference on Environmental Responsibility, promoted by NOCTULA - Environmental Consultants, in partnership with the school's Department of the Environment. The conference, which will feature a diverse panel of speakers, will assess the path taken by the Legal Environmental Liability Regime. It will be a unique opportunity to ensure legal compliance of companies, involving stakeholders such as people responsible for environmental management and top management, insurance, from environmental consultants, lawyers and students. The closing of the conference will be made with a discussion on the main problems and potential improvements in the implementation of the Diploma of Environmental Responsibility.

Registration can be made until May 10th, through an online form.

## CEM 2016 will take place in Lisbon CEM

CEM 2016, the 12th International Conference and Exhibition on Emissions Monitoring will take place in Lisbon from 18th to 20th May 2016. The conference began in 1997 and since then has been held in countries as diverse as the UK. Netherlands, Denmark, France and Switzerland, among others, now coming to Portugal. Due to the relevant issues connected with air quality that have been under scrutiny recently - including the excess of premature deaths due to air pollution and the emissions reduction targets ratified in COP21 in Paris - Marcus Pattinson, the organiser of CEM2016, believes the timing of the conference is extremely relevant. The event brings together the international emissions monitoring community to network, exchange ideas and discuss technologies, methods, applications, relevant legislation and regulations for all air pollutants, including particulate matter, SO2, NOx, VOC and greenhouse gases. The conference program will therefore be diversified, with 48 presentations spread across 7 main thematic areas.

<u>CEM</u>

## Recycling in Portugal up by 6% in 2015

Sociedade Ponto Verde



In 2015, Portuguese citizens sent 442,000 tons of packaging for recycling, which represents a 6% increase compared to the previous year, 2014. These thousands of tons of packaging originated in the domestic flow, as well as small businesses and the Horeca channel (hotels, restaurants and cafes). Plastic packaging had the largest increase, with 115,071 tons sent for recycling, representing a growth of 32% when compared to 2014. On the other hand, glass selectively disposed by urban consumers increased by 4% and reached 182,014 tons. The paper and card flow decreased by 12%, with 111.8 tons of this waste stream being sent for recycling. Finally, metal packging increased 14% compared to the figures of the previous year, with nearly 28 tons collected. Sociedade Ponto Verde attributes the success of the obtained results to the continuous awareness raising effort that has been carried out over its 20 years of activity, and believes that recycling will continue to increase from year to year.

# World Health Organization sends warning about Environmental Risk Factors

New estimates from the World Health

Organization (WHO) indicate that, in 2012 alone, 12.6 million people died as a result of living or working in unhealthy environments - almost 1 in 4 of all global deaths. Environmental risk factors, such as pollution of air, water and soil, exposure to chemicals, climate change and ultraviolet radiation contribute to more than 100 diseases and injuries.

The second edition of the report "Preventing disease through healthy environments: an overall assessment of the environmental risks of disease burden" reveals that, since the report was first published a decade ago, deaths due to noncommunicable diseases (NCDs), mostly attributable to air pollution (including exposure to secondhand tobacco smoke), amount to as much as 8.2 million of these deaths. Noncommunicable diseases, such as stroke, heart disease, cancers and chronic respiratory diseases currently account for about two-thirds of all deaths caused by unhealthy environments.

At the same time, deaths from infectious diseases such as diarrhea and malaria, often related to poor water quality, sanitation and waste management, have decreased. The increase in access to safe drinking water and sanitation has been primarily responsible for this decline, as well as better access to immunization, insecticide-treated mosquito nets, and essential drugs.



A global assessment of the burden of disease from environmental risks Anauters and C Grothy The ord Unice World Health Organization

WHO



# DID YOU KNOW THAT...

Pulses have nitrogen fixing properties that can improve the fertility of the soil? Using pulses in agricultural systems can reduce soil erosion and contribute to the control of pests and diseases.

Depending on the species and environmental conditions, pulses are biologically capable of fixing up to 350 kg/ha/year of nitrogen. Furthermore, nitrogen fixing properties can help eliminate the dependency of synthetic fertilizers, thus producing a lower carbon footprint and indirectly reducing greenhouse gases emissions. FAO

# LAW

## **Ordinance 854/2015**

Ordinance 854/2015 of November 19th 2015, issued by the Ministries of Finance and Environment, Spatial Planning and Energy - Offices of the Assistant Secretaries of State and the Budget and the Environment, authorizes the Portuguese Carbon Fund to make the allocation of charges relating to the financing agreement for the granting of aid under the « Project support program in the country to grant the Portuguese Carbon Fund » for the removal of greenhouse gases - MOBI.E Project (the Programme for Electric Mobility in Portugal (MOBI.E) created in February 2009 with the purpose of creating conditions for the massification of the electric vehicle). Government of Portugal



# AGENDA

#### 28-30 April 2016

**CENVISU2016 - 4th Global Conference on Environmental Studies** Kusadasi, Turquia http://www.awer-center.org/cenvisu

### 11 May 2016

Environmental Responsibility Conference Viseu, Portugal noctula.pt

#### 16-18 May 2016

International Conference on Coastal Management Osaka, Japan coastalzonemanagement.conferenceseries.com

#### 18-20 May 2016 CEM 2016 Lisbon, Portugal www.cem.uk.com



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**Formato Verde** – Communication, Training and Content Management Ltd.

# VAT Number: 506083357

#### Writing and Editing:

Formato Verde – Communication, Training and Content Management Ltd. R. São Roque da Lameira, 2129, 4350-317 Porto, Portugal

#### Publication Director: Miguel Laranjo

Registration Number: 126026

Frequency: Bimestrial

#### Legal Deposit: ISSN 2182-0279

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