



FAO-CIHEAM Network on Sheep and Goats  
Sub-Network on Nutrition



14th International Seminar  
2<sup>nd</sup> Symposium of LowInputBreeds

Feeding and management strategies to improve livestock  
productivity, welfare and product quality under climate change

Tunis, Tunisia, 15 - 18 May 2012



*Organised by:*

The National Institute of Agricultural Research of Tunisia (INRAT) and the Pasture  
and Livestock Agency (OEP-Tunisia)

International Centre for Advanced Mediterranean Agronomic Studies –  
Mediterranean Agronomic Institute of Zaragoza (CIHEAM-IAMZ)

In cooperation with the European large integrating project LowInputBreeds

**First Announcement**

Web: <http://www.iamz.ciheam.org/tunisia2012>

## Background and objectives of the Seminar

Most of world's rural people depend on livestock for their day-to-day livelihood especially in the Mediterranean, African and many Asian countries. To reduce poverty, fight hunger and ensure global food security, there is an urgent need to increase livestock production in sustainable ways. However, livestock production systems in target areas are constrained mainly by low genetic potential, feed shortage, nutrient deficiency, inappropriate husbandry and zoonotic and other emerging infectious diseases. Climate change is also expected to exacerbate the vulnerability of livestock systems and to reinforce existing factors that simultaneously challenge livestock production such as rapid population and economic growth, increased demand for food and products, and increased conflicts over scarce resources (e.g. land tenure, water, and feed). There is an urgent need to assess the interaction between climate change and livestock in different production systems and to identify appropriate options that can help livestock keepers adapt to climate change. The challenge is to improve livestock productivity and to produce safe and dietetic meat and milk under these constraints. Scientific advances in animal nutrition and new strategies in livestock feeding may undoubtedly contribute to this aim, as nutrition is one of the main factors driving livestock systems functioning, efficacy and efficiency.

The National Institute of Agricultural Research of Tunisia (INRAT) will host the 14th Seminar of the FAO-CIHEAM Sub-Network on Sheep and Goat Nutrition on "Feeding and management strategies for improved livestock productivity, welfare and product quality under climate changes", during 15-18 May 2012 in Tunis. This seminar is organized jointly with the 2nd Symposium of LowInputBreeds, an EC-collaborative project ("Development of integrated livestock breeding and management strategies to improve animal health, product quality and performance in European organic and 'low input' milk, meat and egg production"). This will be an opportunity for participants to showcase their basic research, findings and practices in the various thematic sessions stated below.

Since challenges concern all livestock species, we believe this seminar is a good opportunity to bring together specialists in sheep and goat production through the FAO-CIHEAM Subnetwork on Sheep & Goat Nutrition along with those involved in the European-funded LowInputBreeds project (<http://www.lowinputbreeds.org>) to present and discuss recent advances on the *topic* "Feeding and management strategies to improve livestock productivity, welfare and product quality under climate change". The objective is to encourage participation and interaction between scientists and technicians involved in animal production systems, specially in animal nutrition, with a view to introduce methodologies and experiences in small ruminants and other species nutrition that may help to improve sustainability of livestock production by yielding safe and quality products more efficiently and by increasing the capacity of production systems to adapt to current environment and socio-economic changes.

## Organisation

The Seminar is organised by the National Institute of Agricultural Research of Tunisia (INRAT) the Pasture and Livestock Agency (OEP-Tunisia) and the Mediterranean Agronomic Institute of Zaragoza from the International Centre for Advanced Mediterranean Agronomic Studies (IAMZ-CIHEAM, with the collaboration of the Food and Agriculture Organization of the United Nations (FAO). The Seminar will provide 2 days of forum for scientific and technical exchanges and a one-day field trip. The 4th day will be allocated for the LowInputBreeds meeting to discuss project achievements and its future programme. The scientific and technical exchanges will be structured in 4 thematic sessions, with keynote guest speakers and will also be open to free contributions.

Grants, covering all or part of the expenses derived from the participation in the Seminar, will be awarded to applicants selected by the Scientific Committee.

## Scientific Committee

N. Atti, Tunisia	V. Maurer, Switzerland
H. Ben Salem, Tunisia	E. Molina-Alcaide, Spain
M. Ben Salem, Tunisia	P. Morand-Fehr, France
L. Biondi, Italy	D. Morgavi, France
G. Butler, UK	M.J. Ranilla, Spain
M.A. Darghouth, Tunisia	N. Moujahed, Tunisia
P. Frutos, Spain	T. Papachristou, Greece
D. Gabiña, Spain	A. Priolo, Italy
H. Hoste, France	M. Rekik, Tunisia
N. Lassoued, Tunisia	S. Sallam, Egypt
J. Leenhouders, The Netherlands	V. Vasta, Italy
O. Mahgoub, Sultanate of Oman	D. Yáñez-Ruiz, Spain
H.P.S. Makkar, FAO-Italy	G. Zervas, Greece
M. Mehouchi, Tunisia	

## International Organisation Committee

H. Ben Salem, Coordinator of the FAO-CIHEAM Sub-Network on Sheep & Goat Nutrition  
D. Gabiña, Deputy Director of IAMZ-CIHEAM  
A. López-Francos, IAMZ-CIHEAM  
P. Morand-Fehr, General coordinator of the FAO-CIHEAM Network on Sheep & Goat  
H. Willer, LowInputBreeds, Switzerland

The Mediterranean Agronomic Institute of Zaragoza will hold the Secretariat of the Meeting.

## Convenor

Hichem Ben Salem (INRAT)

## Local Organizing Committee

Staff of the Laboratory of Animal & Forage Production (INRAT)

Staff of the Pasture & Livestock Agency (OEP-Tunisia)

## Preliminary programme

### 15 May

08.30 - 09.30 Registration  
09.30 - 10.00 Opening ceremony  
10.00 - 10.15 Presentation of the agenda and objectives of the Seminar  
10.15 - 12.45 **Session 1.** Production and overall nutrition efficiency  
12.45 - 14.00 Lunch  
14.00 - 17.30 **Session 2.** Options for mitigating/coping with climate change

### 16 May

09.00 - 12.45 **Session 3.** Local feeding resources based systems  
12.45 - 14.00 Lunch  
14.00 - 16.30 **Session 4.** Animal welfare and product quality  
16.30 **Conclusions and close of the Seminar**

## 17 May

All day            Field trip

## 18 May

All day            Progress reports from the **LowInputBreeds project** (open to all participants)  
General assembly of the LowInputBreeds project (only project members).

## **Seminar Proceedings**

The Seminar Proceedings, including the text of keynote lectures, theatre presentations and posters accepted by the scientific committee will be published in the CIHEAM journal *Options Méditerranéennes*. Texts are to be written in English.

## **Registration fees**

Before **31 March 2012** registration fees for the two days of seminar and the technical visit will be 250 euro, after which fees will be 300 euro. Fees include attendance to the Seminar, refreshments and lunches and a copy of the Proceedings. The mode of payment will be indicated in the Second Announcement

## **Language**

The working language of the Seminar will be English.

## **Call for Proposals: Deadline 30 November 2011**

Free contributions are welcome for all sessions, either as theatre presentations or posters. Participants who wish to present a free communication should send their summary, indicating their preferred session. Preliminary registration forms accompanied by the summary (not exceeding 250 words), should be sent (preferably by e-mail) to the Mediterranean Agronomic Institute of Zaragoza before **30 November 2011**.

**Mediterranean Agronomic Institute of Zaragoza**  
Avenida de Montañana 1005, 50059 Zaragoza. Spain  
Tel: 34 976 716000 - Fax: 34 976 716001  
E-mail: iamz@iamz.ciheam.org

The deadline for submission of the full text of communications accepted by the scientific committee is **15 April 2012**. All accepted papers will be reviewed and published in the Seminar Proceedings.

## **Accommodation**

Participants will be accommodated in hotels in Tunis. A list of hotels will be included in the second announcement.

## **Scholarships**

The organisers will award a limited number of scholarships that may cover registration fees, accommodation and travel. Applications, together with the corresponding CV, should be sent before **30 November 2011** to the Mediterranean Agronomic Institute of Zaragoza, Spain. Preference will be given to participants from less developed countries whose paper has been accepted by the Scientific Committee.