Collaborative Agreement

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&

INRA (Morocco): R. Balaghi

1. **General context**
2. **Main objectives**
3. **Main Results**
4. **Perspectives**

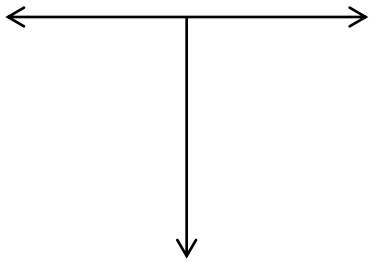
1. General context

Morocco

Min Agri

INRA (DSS)

Crop monitoring



EU

DG Agri

JRC (ESTAT)

Crop monitoring

Collaboration in the field of crop monitoring

PRODUCTION = YIELD *AREA

MARS AGRI4CAST

1. General context / know how

INRA

Production/yield forecast
Knowledge OR connection with Moroccan institutes

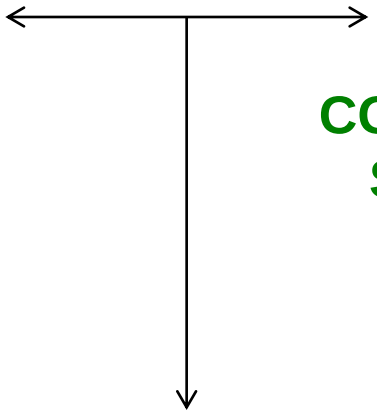
Statistics
Meteorology
Remote sensing
Field surveys

JRC – MARS Unit

Production/yield forecast
Knowledge based on

Remote sensing
CGMS (including crop modelling, Statistics, meteorolgical data)

Bulletins since 1994



Definition of the objectives of the CA

MARS AGRI4CAST

2. Main objectives

- **Obtain/Exchange scientific data**
- **Reinforce the cooperation in the field of production estimate**
- **Promote mutual interests**

List of actions

2. Main objectives / actions

List of actions planned in the CA

-Identification of crop modelling issues in order to improve crop production forecast
-Exchange in the fields of agro-phenology, agricultural meteorology, GIS application, develop. research projects
-Staff training
-Set-up og operational crop forecasting system
-Transfer of technology/know how
-Publication of bulletins
-Common participation to scientific events
-Common scientific publication

- Actions to implement with own financial resources
- Actions planned for a duration of 5 years starting from 2007 (> end foreseen June 2012)

With possible extension (3 or 5 years) and re-definition of the objectives/actions

3. Main Results

-Identification of crop modelling issues in order to improve crop production forecast
Up to 2009: focus wheat, barley and maize
Later: soft and durum wheat, barley
-Exchange of data:
INRA (with its partner DSS) > JRC : statistics (provinces)
JRC > INRA : interpolated meteo data (50 x 50 km, 25 x 25 km)
feedback from INRA with its partner (DMN)
-Staff training :
scientiscts from Oujda, Rabat, Settat > JRC (Ispra, Italy) in 2008, 2009 and 2010
-Set-up og operational crop forecasting system/Transfer of technology/know how
Training on premises of INRA (Settat and Rabat)
to use Crop Growth Monitoring System
-Publication of bulletins
Since 2009, with continous improvements
-Common participation to scientific events
CGMS experts meeting (21-22 Nov 2011 in Ispra)
-Common scientific projects
E-AGRI for 3 years (EC funding in the frame of FP7 programme)

4. Perspectives / Room for improvement in order to use CGMS

> E-AGRI (with Alterra (NL) that developed CGMS on behalf of JRC in the frame of MARSOP project)

CGMS

Level 1 (meteo) – input of DMN expertise

Level 2 (crop / models) – input of INRA as regional network (phenology, field observation)

Level 3 (statistics/analysis) – input of DSS

4. Perspectives / Short-term

Production of bulletin by INRA using the 3 levels with support of JRC – particular attention to the 3rd level

Publication : state of the art about cereals production forecast

Final report with emphasis on extension of the CA

4. Perspectives / Long-term

Production = Yield * Area

New set of information on crop: crop mask, soil data, phenological calendar, diseases

Thank you for your attention

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