



EX-ACT presentations and trainings

- **SWEDEN** – Stockholm, 8 May 2012: EX-ACT was presented at Kulturhuset in Stockholm, hosted by the Swedish International Agricultural Network Initiative (SIANI). The seminar, “Carbon in Soils”, primarily focused on the question of whether agriculture has the potential to reduce GHG or not. Hence, EX-ACT had its rightful place, illustrating how the agricultural sector can act as carbon sink as a result of improved management practices.



Sweden, 8 May 2012

- **SWEDEN** – Stockholm, 22 May 2012: The Swedish Ministry of Rural Development is in the coming months performing ex-ante evaluations of the Swedish Rural Development Plan (2007-2013). EX-ACT was presented in front of the team that is undertaking ex-ante evaluations. The main purposes of the presentation were firstly to raise awareness of the potential of the tool and secondly how the Swedish Ministry can make use of the tool in the context of the ex-ante measurements.
- **BRAZIL** – Cuiabá, 23-24 May 2012: The Instituto Brazil in cooperation with other organizations in the Mato Grosso State organized The International Seminar on Green Economy. EX-ACT was presented as a tool to provide support in the estimation of environmental services and financial compensation, which was one of the sub-themes tackled during the seminar.
- **CZECH REPUBLIC** – Prague, 28-30 May 2012: The third FAO regional workshop on Rural Development focused on “*Best practices in green jobs creation for ensuring sustainability of rural households and resource use as a part of rural development*”. The workshop was centered on defining green agriculture/green economy and green jobs, governments’ roles and possible measures to support and promote green agriculture. In this context, the concept of Climate Smart Agriculture and EX-ACT was introduced to the participants of the seminar.
- **ITALY** – Rome, FAO, 6-8 June 2012: Various stakeholders gathered for the World Farmers’ Organization (WFO) general assembly. During the meeting they expressed their interest and commitment to tackle climate change issues by developing Climate Smart Agriculture platforms. An interest to receive support for the development of such platforms was also expressed during the workshops held in Brazil, Czech Republic and South Africa,

- **SENEGAL** – Dakar, 8-9 May 2012: the EX-ACT team sponsored the workshop “Climate Smart Agriculture in Western Africa”, organized by IRD (France), LEMSAT (Senegal), University of Antananarivo (Madagascar) and CIAT-TSBF (Mali). The participants (researchers, stakeholders of civil society working in Africa) have decided to create a network entitled «Soil carbon for a sustainable agriculture in view of climate changes in Africa». Such network will work to better acknowledge the integrating role of soils and to support the collaboration and the synergy between research and development.

- **BRAZIL** – Rio de Janeiro, 20-22 June 2012: During the United Nations



Conference on Sustainable Development in Brazil, the EX-ACT team, in partnership with IRD (French Research Institute for Development) and ADEME (the French Agency for Environment and Energy), participated in an on-side event at RioCentro on “The Green economy and agriculture: tools to tackle the impacts of climate change”. A review of tools at landscape and regional scale was presented, including EX-ACT and ClimAgri, the ADEME tool, followed by the release of the final report.

A comparative study on GHG tools for the agriculture and forestry sector

Review of GHG calculators in agriculture and forestry sector, a guideline for appropriate choice and use of landscape based tools

In parallel to IPCC work, many GHG calculators have been developed to assess agriculture and forestry practices. A review, in which the EX-ACT team is a partner, has been carried out to highlight their methodological differences, propose a typology, and discuss main issues when working at landscape scale. Eighteen major tools were identified, amongst them EX-ACT, ClimAgri, Cool Farm Tool, Holos, USAID FCC and ALU. GHG calculators have been developed following different approaches, with different targets and objectives. The review proposed the following broad typology for classifying these tools and helping users choosing the most suitable one according to their need:

- **Raising awareness:** it includes simple tools with a limited perimeter, which are not solution oriented. *Examples: US cropland GHG calculator*
- **Reporting:** the aim of such tools is to analyse specifically the current situation, to make comparisons between countries or farms based on a common basis and elaborate adapted policy in the future. *Examples: ClimAgri, ALU*

- **Project evaluation:** calculators under this category compare a baseline to a “with project” situation, oriented or not on carbon markets. *Examples: USAID FCC, EX-ACT, Holos*
- **Market and product oriented tools:** they provide GHG results per product, in order to compare different product rather than assessing a territory. *Examples: Cool Farm Tool*

Application of the EX-ACT tool on specific projects

Managing and decreasing forest fires to preserve the remaining primeval forests in Russia

RUSSIA

During an EX-ACT training in Russia, in June 2011, the EX-ACT tool was applied on two projects. The [reports](#) of these pre-appraisals are currently available on the EX-ACT website.

The first project, the Forest Fire Emergency Response Project (FERP), aims at improving forest fire prevention and management, while similarly enhancing sustainable forest management. The project results in a net sink of approximately 1.23 billion tons of CO₂eq during the 25 years of appraisal. The decreased fires show the importance of finding a balance between climate change mitigation and the incorporation of preventive measures, i.e. deforestation/firebreaks, as well as capacity building, i.e. investment in infrastructure, vehicles and human capital. Moreover, the high profitability index of this project, i.e. Net Present Value per dollar invested, in the range of 20-28 US\$, underlines the relevance of public investments for fire protection. It also illustrates the relevance of fire protection for private forest investments and opens a window for business opportunities in case of access to carbon markets.

In addition, EX-ACT was used to provide an estimation of the mitigation potential of the WWF Bikin Forest Conservation Project, also in Russia. The Bikin River Basin is the largest, last remaining and untouched temperate primeval forests in the northern hemisphere. The project aims at mitigating the impacts of climate change through the protection of large-scale virgin forests in the Bikin Area and preserving the natural habitats of some of the most endangered species. These forests are the habitats for the

Udege and Nanai indigenous people and the Amur tiger. According to the EX-ACT analysis, the WWF Bikin project has the potential to sequester approximately 50 million tons of CO₂e during 30 years of appraisal and hence contributes to climate change mitigation.



The Amur Tiger, or Siberian Tiger –

<http://www.fanpop.com/spots/amur-tigers/images/27143883/title/amur-tiger-snow-photo>

Sustainable Agro-Pastoral and Land Management Promotion Project under the Community Development Program Support Project (PAPNDP) CAMEROON

The project aims to enable communities to tackle land degradation in critical areas, with the objective to increase farm productivity. It is further intended for the project to generate key global benefits, e.g. the reduction of CO₂-emissions, the increase of carbon sequestration and the decrease of sediment discharge into critical water systems. The project is composed of 290 micro-investments systems. However, the environmental and economic analysis using EX-ACT was based on two of the investment systems: “land under agroforestry farming systems” and “pasture lands for cattle production under fodder cropping system”. These investment systems

represent about 70% of the total investments. EX-ACT calculations show that the 2 micro-projects sequester an average of 2.1 tons and 3.4 tons of CO₂-eq/ha/year respectively.

With a social price estimated at USD 20 per ton of CO₂-eq abated, the Internal Rate of Return (IRR) of the two projects ranges between 19-22%. The Net Present Value resulted USD 5,300 and USD 10,400 respectively for the “pasture lands for cattle production under fodder cropping systems” and “land under agroforestry farming systems”. It is relatively positive results, illustrating the investment potential of the projects.

EX-ACT website publications

Case studies:

- Pre-appraisal of the [Forest Fire Emergency Response Project](#) and the [Bikin Forest Conservation Project](#)
- The [Plan Maroc Vert](#), the Moroccan national strategy launch in 2008 to make agriculture the driving force for economic growth
- Carbon balance of the [Community programme of action - resilience to climate change](#) in Niger

Scientific article:

- Branca G., Hissa H., Benez M.C., Medeiros K., Lipper L., Tinlot M., Bockel L., Bernoux M. 2012. [Capturing synergies between rural development and agricultural mitigation in Brazil](#). Land Use Policy, 30, 507-518. doi: 10.1016/j.landusepol.2012.04.021

Papers mentioning EX-ACT:

- Colomb et al, 2012, Review of GHG calculators in agriculture and forestry sector, a guideline for appropriate choice and use of landscape based tools ([report](#), [annexes](#), [summary](#))

The FAO-EX-ACT team* supports appraisal of agriculture and forestry projects all over the world, please contact us if you are interested.

*Louis Bockel, Martial Bernoux, Giacomo Branca, Patricia Gorin, Madeleine Jönsson, Rocio Sanz Cortés, Ophélie Touchemoulin

We welcome your questions and feedback; they will help us make this newsletter more useful and enjoyable for you.

Email: EX-ACT@fao.org

Website: <http://www.fao.org/tc/exact/en/>

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