



Africa Agriculture Science Week & FARA General Assembly

10-16 June 2007
Johannesburg, South Africa



FARA General Assembly Side Event Report (11 June 2007)

Name of side event:	Oasis Challenge Program to Combat Desertification
Sponsoring organization(s):	ICRISAT/ICARDA
Name(s) & email(s) of contact persons:	Mark Winslow m.winslow@cgiar.org

Background/rationale of the side event

The purpose of this 90-minute side event was to discuss priorities and partnerships for a proposed global Challenge Programme ("Oasis") to contribute to the fight against desertification (dryland degradation, due to human and natural forces). While Oasis is a global program, the desertification problem is particularly serious in Africa and relevant to FARA's meeting theme on 'Learning lessons from responding to risks and disasters.'

Principle agreements/actions/recommendations *(include who is responsible for implementation & when)*

- There was collective support for the Oasis concept.
- Partnerships were strengthened; the 21 participants hailed from FARA members Africa Rice Center, AU/SAFGRAD, Bioversity, CIRAD, European Commission, ICRISAT, ICARDA, INRAN-Niger, International Centre for Underutilized Crops, University of Nairobi, TSBF-CIAT, and World Agroforestry Centre.
- A holistic, systems approach including broad and deep partnerships was recommended, represented by five thematic "knowledge streams" that were endorsed.
- The importance of capacity-building targeted to support the Oasis objectives and activities was emphasized by the group.
- The importance of weighing impacts on the natural environment in addition to agricultural eco-systems was emphasized, because these environments are especially fragile.

Full Report: (1400 words)

Oasis: Global Research-for-Development Challenge Programme for Combating Desertification & Dryland Degradation

Side event held on Monday 11 June, 12:30 to 2:00 pm, Board Room 7, Sandton Convention Center, Johannesburg, South Africa

The purpose of this 90-minute side event was to discuss priorities and partnerships for a proposed global Challenge Programme ("Oasis") to contribute to the fight against desertification (dryland degradation, due to human and natural forces). While Oasis is a global program, the desertification problem is particularly serious in Africa and relevant to FARA's meeting theme on 'Learning lessons from responding to risks and disasters.'

Six speakers provided introductions to the topic, followed by discussion. The agenda and participant lists are provided separately.

Dr. Mark Winslow began with an overview of the history, purpose and strategy of Oasis. The initiative was conceived to address the inadequacy of scientific input into the fight against desertification. This inadequacy persists despite the global commitment embodied in the United Nations Convention to Combat Desertification (UNCCD). The Climate Change Framework, in comparison is backed up by the scientific credibility of the IPCC, engendering high credibility and impact. The UNCCD on the other hand has been plagued by scientific ambiguities such as widely varying estimates of the extent and severity of the problem.

Oasis is currently one of three Challenge Programme concepts approved by the CGIAR for building out into

pre-proposal stage. If the pre-proposal is approved the next stage would be to write a full proposal.

Dr. Winslow explained that Oasis builds on the long history and partnerships of its two convening centers, ICRISAT and ICARDA. Ten additional CGIAR centers have pledged to contribute dryland expertise as well. Oasis is in the process of building additional partnerships and renewing existing ones that were formed by its member organizations.

In the past, many biophysical studies on combating desertification were carried out and recommendations issued, without reference to their impacts on livelihoods — and were as a consequence not adopted by land users. Oasis recognizes that land users will only take actions to combat desertification if those actions also provide them with secure and prosperous livelihoods. Therefore, Oasis' priorities are integrative and include social, economic, institutional, and livelihood perspectives as well as biophysical considerations.

Based on this perspective, previous consultations with a wide range of partners had led to the following set of five priorities:

1. Understanding human-induced degradation of dryland agricultural and natural ecosystems
2. Improving dryland landscape, soil, water and nutrient management
3. Improving dryland policy, market, and institutional options to combat desertification
4. Development pathways and livelihood options that lead to more sustainable, diverse, remunerative, and resilient dryland management
5. Improving co-learning by linking sources of local and scientific knowledge in the drylands

Dr. Winslow also reviewed the partnership landscape. There are many institutions involved in anti-desertification activities, but they are insufficiently integrated. Oasis proposes to integrate scientific teams globally into partnerships through joint proposals and fundraising, addressing investor's desire to see less fragmentation and higher visibility. Oasis does not replace ongoing research partnerships but adds value to them by proposing joint projects that bring larger critical mass and an integrated approach to make breakthroughs on heretofore-intractable or under-researched issues.

Dr. Saidou Koala then presented on the Desert Margins Program (DMP) and its potential fit to Oasis. The DMP is a collaborative effort convened by ICRISAT that unites nine African countries straddling the desert margins that ring the heart of Africa: Botswana, Burkina Faso, Kenya, Mali, Namibia, Niger, Senegal, South Africa and Zimbabwe. A large proportion of the 120 million inhabitants of these countries depend on farming and livestock-raising for their food supplies and income. But rainfall is low and unreliable in these areas, while human and livestock populations are increasing—depleting the land of its vegetative cover, and exposing its soils to erosion and biodiversity loss. This traps people in a cycle of poverty.

The goal of the DMP is to help these countries arrest land degradation through more sustainable practices and systems that improve livelihoods. The DMP pursues this goal through partnership-based research-for-development activities, demonstration to farmers, and capacity-building.

In addition to ICRISAT as convenor and active participant, the nine DMP countries are assisted by four other Centers of the Future Harvest Alliance of Centers supported by the CGIAR (Consultative Group on International Agricultural Research): ICRAF, ICRISAT, IFDC, ILRI and TSBF-CIAT (acronyms defined here). In addition, three advanced research institutes from the developed world contribute their expertise in specific areas (CEH, CIRAD and IRD). Regional networks (ASARECA, CORAF, and SADC-FANR) and non-governmental organizations are also core participants.

The main focus of DMP in its Phase I was to characterize carefully-selected benchmark sites and develop potential solutions to desertification that yielded better livelihoods. This approach is consonant with that of Oasis, so DMP is a natural fit.

Dr. Andre Bationo then presented on 17 years' work done by TSBF-CIAT and partners in the Sahel. At the time this work began, the prevailing view was that water was the limiting constraint, and that not much could be done about that given the poverty of these countries, making irrigation systems too costly. But Bationo soon concluded that soil fertility was an even greater constraint.

He described work on enhancing dryland soil fertility, which links directly to Oasis' KStream 2. Techniques such as microdosing can boost yields to the same degree as the Green Revolution on a percentage yield increase basis (50-100%), and is profitable and low-risk. The addition of rock phosphate and organic matter further raises yields up to triple those of the unfertilized control. The zai technique can rehabilitate bleak, barren degraded land into productive cropland.

It is clear from such research that much potential in the drylands is going unrealized at present. If soil fertility could be raised, the responsiveness of modern crop varieties would also be more fully expressed, adding

another increment to yields.

Next, Dr. Denis Depomier of CIRAD described dryland research in Africa by CIRAD and partners. He mentioned several important desertification-related networks and partnerships that CIRAD participates in: European Desert*Net, Oasis, and the AIDA project. He reported that CIRAD has formed an inter-disciplinary group called FEZA to foster an integrated systems approach befitting this complex problem, and described its priorities. Areas of dryland focus at CIRAD include pastoral systems in the Sahel; livestock management in dry regions; management of renewable resources; water management; remote sensing and environmental analysis; innovation and dynamics; and training and capacity building.

He described the main partners, including Agrhymet, ILRI, ICRISAT-ICARDA (Oasis), OSS, and INRA.

He listed a number of pressing issues and questions that need to be addressed in order to combat desertification. How do we set research priorities amidst so many complex and dynamic factors? How do we implement new innovations that need policy as well as technical change? And how do we coordinate among many simultaneous initiatives?

He then described the AIDA project. AIDA is a joint initiative between CIRAD-France, FARA, Ghana, CTA, The Netherlands, the University of Nairobi (Kenya), the AGHRYMET regional centre (Niger), the Regional Universities Forum for Capacity building in Agriculture (RUFORUM, Uganda), the University of Malawi (Malawi) and Wageningen University (The Netherlands).

The strategic objective of this EU-funded project, just launched this year, is to enhance awareness and generate knowledge about long-term trends and innovations in agriculture and environment in drylands Africa. The focus will be to integrate the knowledge of farmers and communities and fully involve community members and other stakeholders in agricultural innovations. AIDA will produce a comprehensive database of local and regional initiatives aimed at improving livelihoods in dryland Africa, and then critically assess the initiatives to identify the drivers behind successes and failures.

Next, Dr. Mohamed El-Mourid presented on ICARDA and partners' work focused on the northern tier of African countries. This work places priority on water harvesting and use; biodiversity protection; control of wind erosion; crop/land management and conservation; production system diversification; and rangeland/crop-livestock integration. He illustrated a number of examples of best-bet practices for each of these priorities.

He added though that without effective institutions and policies, these technical options will not have large impact, so these aspects must be integrated into research planning. The approach needs to improve co-learning by linking local and scientific knowledge. Communities must be empowered because they make the final choices regarding how they will manage their lands. He described a formal process for involving communities in dryland management research leading to policy influence as well as community empowerment and technical change.

Discussion

The remaining 20 minutes of this short side event were for discussions. Two main issues received discussion:

1. In Oasis we need to pay attention not only to agricultural systems but also to environmental impacts and valuation, because this is the resource base that underpins livelihoods and results in desertification.
2. We also need to ensure a strong capacity-building component in Oasis, e.g. though the knowledge-sharing priority item.

Side event linked to which FARA networking support function? (check one)

- Advocacy and resource mobilization**
- Access to knowledge and technologies**
- Regional policies and markets**
- Capacity strengthening**
- Partnerships and strategic alliances**

Where relevant, note who has success stories, &/or useful resource people or institutions related to side-event theme

Please see success stories and other relevant information at the Oasis website --
<http://www.oasisglobal.net/successes.htm>