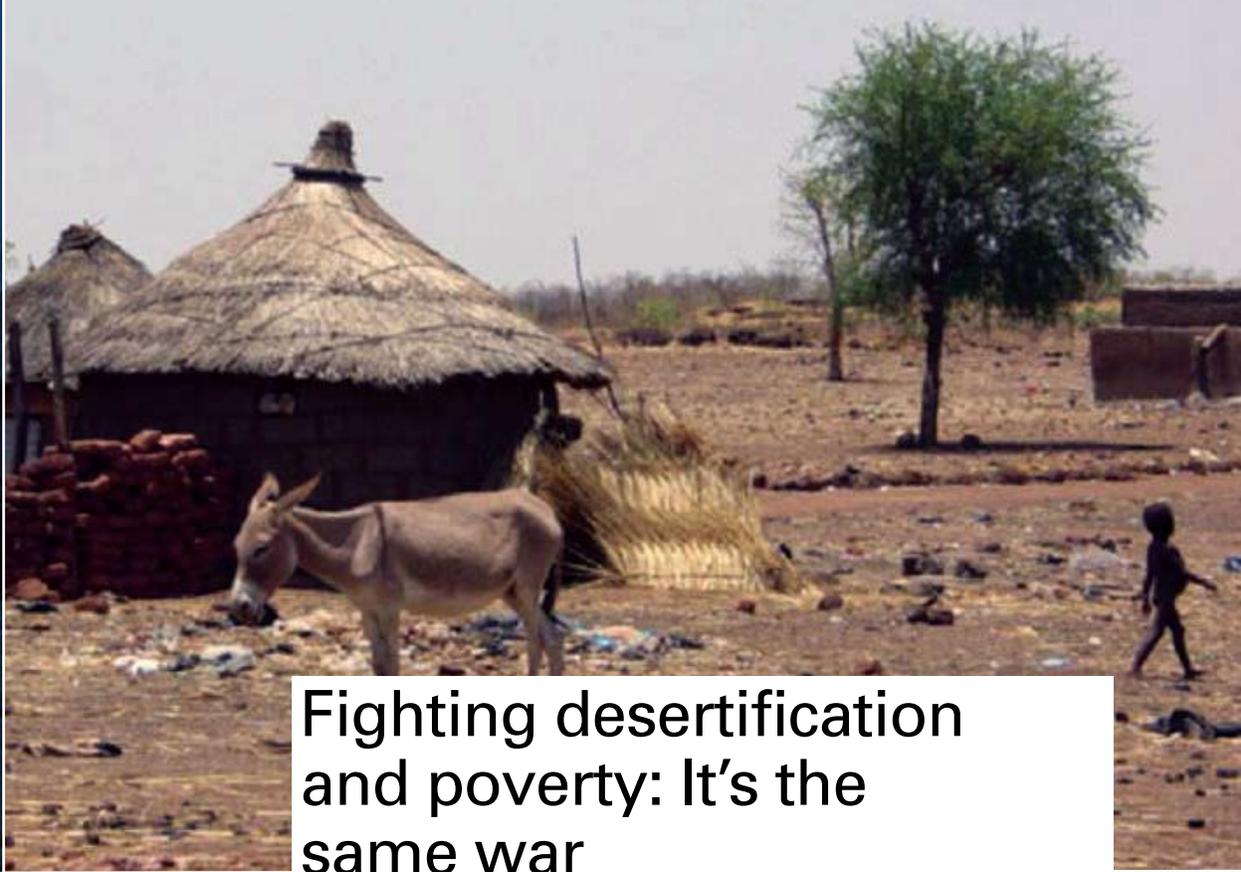


RURAL POVERTY and ENVIRONMENT

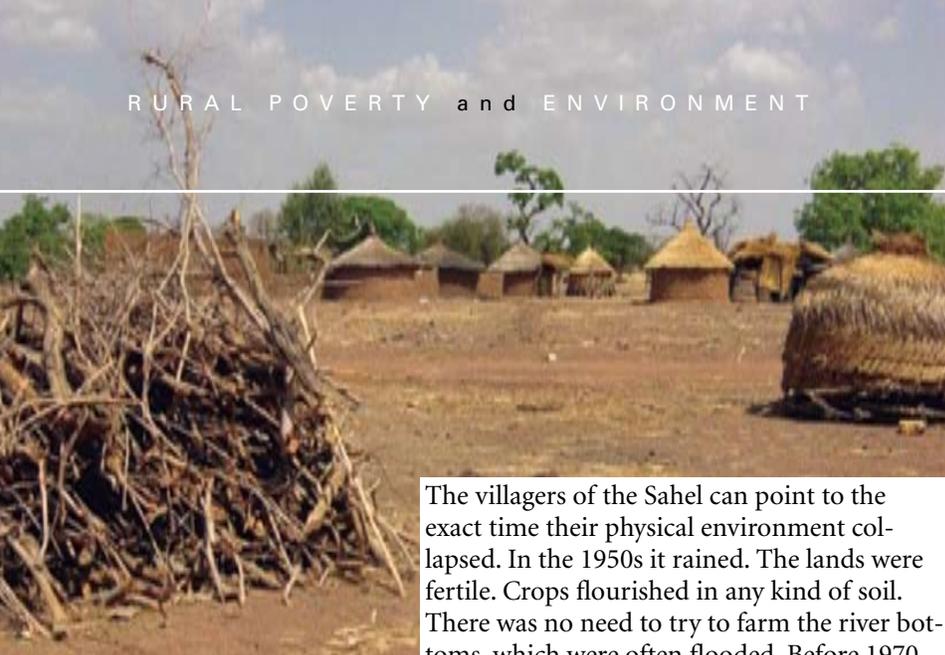


Fighting desertification and poverty: It's the same war

IDRC: Renaud De Plaen

Environmental degradation is common to semi-arid areas of Burkina Faso.

The people of the Sahel — that huge region stretching along the southern edge of the Sahara Desert — are still striving to recover from the fallout of the terrible droughts that have afflicted the area since 1973. Drought has shattered the momentum of socioeconomic development in Burkina Faso, Mali, Mauritania, Niger, and Senegal. According to researchers with Burkina Faso's Institut de l'environnement et de recherches agricoles, "Rural men and women are now struggling to survive in a land that is exhausted, denuded, desiccated, and swept away by the wind and water."



Firewood, the main source of fuel for most households in rural communities, is also sold along major roads.

The villagers of the Sahel can point to the exact time their physical environment collapsed. In the 1950s it rained. The lands were fertile. Crops flourished in any kind of soil. There was no need to try to farm the river bottoms, which were often flooded. Before 1970, people and livestock exerted very little pressure on natural resources. Farmers in northwestern Burkina Faso, one of the areas most severely affected by desertification, would farm a field for 3 or 4 years. “We would then leave the fields fallow for 10 to 15 years, and move on to cultivate new lands,” they recall.

They did not foresee the day when they would have to learn to build filter dikes, berms, and stone ridges following the contour of the land; to create manure pits; and to resort to hedge-row and alley farming — and to do all this, moreover, in a constantly shifting physical, social, and political environment.

Today, people say that they cannot do without modern techniques to maintain the fertility of their arid lands. If they want to feed their families, send their children to school, or even just survive, Sahel farmers have to experiment and become increasingly innovative.

In July 2004, under the aegis of the International Development Research Centre (IDRC), a subregional workshop was held in Saly Portudal, on the coast of Senegal, to learn from experiments in combating desertification in the Sahel. This was an opportunity for researchers, nongovernmental organizations (NGOs), and policymakers to look back over 30 years of struggle against drought and desertification, to examine the results of research, and to plot new courses.

Innocent Butaré, senior program administrator in IDRC’s regional office for West and Central Africa in Dakar, was the driving force behind this meeting, which brought together West Africa’s leading experts in combating desertification. There was no question that

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IDRC would host such a workshop: “IDRC chaired the scientific committee of the International Convention to Combat Desertification,” Butaré points out.

“After the 1992 Rio Summit, it was clear that the people, the women, and civil society had to be involved.”

Stages in the campaign

Innocent Butaré explains that the struggle against desertification in the Sahel has seen three major kinds of interventions. The first were technical and involved major reforestation programs and the construction of dikes and berms to retain runoff water and slow soil erosion. But these techniques were often inappropriate in the Sahel and were not adopted by the local populations and institutions.

The second set of interventions was more socioeconomic. “After the 1992 Rio Summit,” says Butaré, “it was clear that the people, the women, and civil society had to be involved.” This determination to promote inclusiveness, consultation, mobilization, and cooperation culminated in a third series of interventions: national action plans to combat desertification (NAPCDs).

However, just when the countries of the Sahel were finally embarking on an integrated campaign against desertification, the donors who had insisted on the NAPCD approach demanded that priority be given to combating poverty. NAPCDs gave way to poverty reduction strategy papers (PRSPs) and strategic frameworks to combat desertification (SFCDs) and, when governments found that adopting

Woodland degradation.



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the latter could mean significant debt relief, they made poverty reduction their new priority and put all their efforts into it.

“With the PRSP now the new fashion,” says Innocent Butaré, “we have lost sight of the battle against desertification. Our challenge now is to restore that battle to its proper place among the chief priorities of development policy. But how can we do this?”

Renaud de Plaen, an IDRC program officer based in Ottawa, sees a dual challenge: “How to integrate plans for combating desertification into poverty reduction strategies and programs for adjusting to climate change.”

In terms of meeting the first part of the challenge, Philippe Zoungrana, former director of the Canadian fund to support the International Convention to Combat Desertification, claims, “The greatest lesson to be drawn from experience in combating desertification is that the campaign must go hand-in-hand with the poverty campaign. There is no frontier between the struggle against desertification and the struggle to reduce poverty.” In effect, antidesertification activities that enlist the participation of poor farmers — such as market gardening, beekeeping, and feeding livestock with harvest gleanings and natural fodders — are exactly the ones that will raise their incomes quickly.

The second part of the challenge, integrating the struggle against desertification into adaptation to climate change, seems self-evident as desertification is now defined as a man-made climatic problem.

The balance sheet

The “Réseau de recherche sur la résistance à la sécheresse au Sahel” (R3S; drought tolerance research network) has helped West African scientists assess and identify the best ways to combat desertification. Financed by IDRC, among other partners, R3S brings together experts under the aegis of the Institute of the Sahel (INSAH) and the Conseil ouest et centre africain pour la recherche agricole et le développement (CORAF; West and Central African council for agricultural research and development).

Since the 1992 Earth Summit in Rio de Janeiro and the adoption of the International



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Convention to Combat Desertification on 17 June 1994, agronomists, water and forestry engineers, sociologists, policymakers, and development partners have been working together to involve local people in efforts to stop desertification.

The process of preparing the national action plans mobilized stakeholders in all categories, from farmers to policymakers, including NGOs and producers’ groups. And it created a proliferation of farmers’ associations, village committees, and management plans. There are even examples of South–South cooperation in preparing NAPCDs, such as that between Senegal and Chad and between Burkina Faso and Mauritania.

However, researchers found that these plans were much more complicated to implement. According to Pape Mawade Wade, water and forestry engineer and coordinator of Senegal’s NAPCD, “Research teams encountered many difficulties in the field, and it was impossible to stick to the original schedule.”

In the case of Burkina Faso, Canadian assistance helped produce concrete results. For example, local researchers developed a way to evaluate the real antidesertification content of various programs. This index measures the antidesertification effort of each administrative body over the course of the year. It has been used to produce a map revealing the uneven distribution of financial efforts at the provincial level in Burkina Faso.

Improved feeding techniques for sheep enhanced women’s livelihoods in Burkina Faso.

“The greatest lesson to be drawn from experience in combating desertification is that the campaign must go hand-in-hand with the poverty campaign.”



Environmental stress resulting from fuelwood collection in the vicinity of N'Djamena, Chad.

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Financing the work created difficulties in most countries, and budgets allocated to the various efforts for combating desertification have been minimal. National institutions responsible for coordination — such as the Conseil national pour l'environnement et le développement durable (CONEDD; National Council for Environment and Sustainable Development) in Burkina Faso and the Conseil supérieur des ressources naturelles et de l'environnement (CONSERE; high council for natural resources and the environment) in Senegal — have faced enormous financial difficulties. This came just at the time when, in most countries, validation of the antidesertification programs was being completed.

As Pape Mawade Wade puts it, “Financial support has been pretty modest. This contrasts with the commitment the donors gave for applying the resolution on urgent measures to be taken in Africa, whereby they would intensify coordination of their activities and provide real support in the process of preparing the NAPCD.”

Communication among the various stakeholders has decreased in several countries. Researchers point to other problems of coordination at senior government levels, particularly

among managers in the various ministerial departments in the areas of environment, agriculture, water, and animal husbandry. In some countries, decentralization has been harmful to antidesertification programs by multiplying the number of players and making fieldwork more complicated.

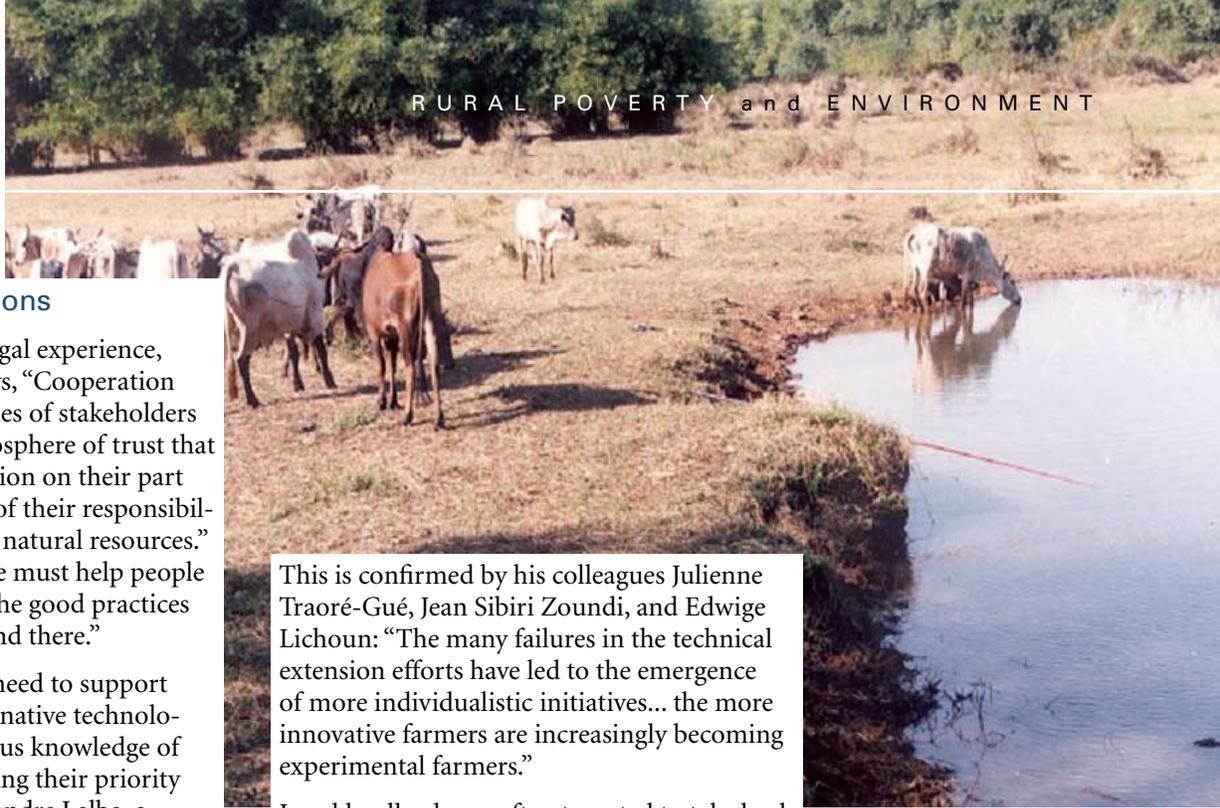
The researchers now understand the importance of the assets, know-how, and power of local players in combating desertification. “Despite the major amounts invested, development that is divorced from the local culture has been unable to produce adequate and sustainable responses to the problems that people are facing,” concludes Nessindoa Julienne Traoré-Gué of the Institut de l'environnement et de recherches agricoles (INERA; institute for environment and agricultural research) in Bobo-Dioulasso, Burkina Faso.

“Despite the major amounts invested, development that is divorced from the local culture has been unable to produce adequate and sustainable responses to the problems that people are facing,”



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Group discussions with local residents identified key problems and local solutions: Women in Linia, Burkina Faso.



Promising new directions

Speaking about the Senegal experience, Pape Mawade Wade says, “Cooperation among various categories of stakeholders has established an atmosphere of trust that has promoted freer expression on their part and a hard-nosed analysis of their responsibilities for the degradation of natural resources.” He adds, “Consequently, we must help people in the field to consolidate the good practices that have succeeded here and there.”

There is consensus on the need to support research into new and alternative technologies, based on the indigenous knowledge of local farmers and considering their priority needs. “We find,” says Alexandre Lalba, a zoologist and economist for INERA, “that the innovations proposed by outsiders are not adopted, even if farmers recognize that they could help resolve problems in a lasting manner.”

Lalba believes that innovative techniques must bear some resemblance to traditional practices. A good example is the improved *zai* system of water and soil conservation. The *zai* is a traditional Mali technique for preparing soil that involves making small, crescent-shaped depressions to catch runoff water, then sowing millet or sorghum seeds in them. Innovative farmers have improved on the *zai* technique by adding compost or manure, using improved varieties of seed, and treating the seeds. A true grassroots initiative, the *zai* has sparked a movement to pool techniques among farmers, and it is spreading throughout Burkina Faso and beyond.

At Saly Portudal, researchers also stress the importance of reconciling individual and community concerns. Alexandre Lalba describes villages that have been deserted by young people, who are hoping to find prosperity elsewhere, and are now populated by the elderly, married women, and children struggling to survive.

“In such situations,” he says, “individual actions have more chance of being accepted.”

This is confirmed by his colleagues Julienne Traoré-Gué, Jean Sibiri Zoundi, and Edwige Lichoun: “The many failures in the technical extension efforts have led to the emergence of more individualistic initiatives... the more innovative farmers are increasingly becoming experimental farmers.”

Local landlords are often tempted to take back lands that have been restored by these innovative tenant farmers, unleashing what has been called “the war of the hills.” These lands that had been rented to women and young people because of their low productivity are now coveted as farmers have shown that this terrain is best suited to the *zai* technique.

Just as the climate is changing, the creativity of researchers and farmers is producing new solutions that in turn give rise to new challenges — the exacerbated inequality of land ownership being a good example. From the farmer to the policymaker, people must learn about the best solutions and debate them.

The researchers insist on the need to increase political pressure and lobby decision-makers in government departments and national legislatures. New outreach and education campaigns targeted at the general public would also help. Pape Mawade Wade regrets the fact that artists and performers have not been enlisted to help inform people in countries severely affected by drought about the international convention. “We need to take them into account in the next round of activities,” he says.

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Sustainable and participatory pastoral resources in Béli, Burkina Faso.

Villages have been deserted by young people, who are hoping to find prosperity elsewhere, and are now populated by the elderly, married women, and children struggling to survive.



Learning to use photography as a communication tool in Sawal, Chad.

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Waiting for the financial partners to act

Although there have been a number of successes in the area of combating desertification and managing natural resources, much remains to be done. In the hope of consolidating past achievements, the researchers have launched an appeal to the financial partners, asking them for “more active support for NGOs in the field, for national research institutions, and for civil society, with a view to preparing tools for lobbying and sensitizing policymakers.”

This brief was prepared by Jean-Marc Fleury based on a case study by Mame Aly Konte and Innocent Butaré.

IDRC's Rural Poverty and Environment (RPE) program is a global program launched in 2005 to support research that meets the needs of the rural poor who live in fragile or degraded ecosystems in Africa, Asia, Latin America and the Caribbean, and the Middle East. Its goal is to strengthen institutions, policies, and practices that enhance food, water, and income security.

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