



**INTERIM REPORT
INTERNATIONAL ECOAGRICULTURE
CONFERENCE AND PRACTITIONERS' FAIR:
27-28 SEPTEMBER 2004**

The International Ecoagriculture Conference and Practitioners' Fair opened on Monday 27 September, at the World Agroforestry Centre, in Nairobi, Kenya. The purpose of the International Conference and Practitioners' Fair is to assess the state of ecoagriculture systems and practices, and to develop a strategy to promote and support ecoagriculture development around the world. This is an interim report of the first two days of the Conference during which participants heard plenary presentations, engaged in Farming Focus Groups, and gathered in four Theme Groups.

PLENARY

ECOAGRICULTURE: INNOVATION ON THE GROUND:

On Monday morning, 27 September, Sara Scherr, Director, Ecoagriculture Partners, welcomed participants and introduced the speakers. Noting that nearly half the areas currently protected for biodiversity are heavily used for agriculture, Dennis Garrity, Director-General, World Agroforestry Centre (ICRAF), stressed the need to challenge the "old" model of segregating agriculture and landscape protection. He mentioned some of the challenges of ecoagriculture, including: determining the technologies and resource management systems that generate the necessary synergies; designing and managing landscapes at the necessary scale; re-shaping incentives for farmers, rural businesses and financial groups; and mobilizing communities to pursue ecoagriculture successfully and at a globally meaningful scale.

Gratien Andres Frezac Coloneth, Talamanca Initiative Costa Rica (Panama), presented on sustaining productive agroforests in the Mesoamerican biological corridor of Panama and Costa Rica. He described the structure of the binational farming alliance working in this World Heritage Site and explained how their traditional organic production methods preserve the ecologic system. He warned that the drop in the price of organically certified products threatens the agro-ecological system of production.

Rajendra Singh, President, Tarun Bharat Sangh (India), presented a case study on community water harvesting in the Arvari river basin, Rajasthan province. Highlighting the relationship between people and the earth, he defined ecoagriculture as a process of "giving back to nature as much as farmers and communities take from it." He said ecoagriculture should not be seen as a productive industry but as a practice that is a crucial part of peoples' cultures. He underscored the importance of peoples' participation in water management through the establishment of water parliaments; stressed the maximum use of traditional technology, wisdom and practices; and urged the involvement of women in decision-making.

Francis Chachu Ganya, President, Pastoralist Integrated Support Programme (Kenya), highlighted the role of pastoralists as protectors of biodiversity. He underscored the central role of mobility and the use of mixed livestock species as measures for sustainable resource utilization and protection in dryland environments. He stressed that mobile pastoralism was a dynamic and viable form of ecoagriculture.

Sara Scherr explained that Ecoagriculture Partners was a public-private-partnership created during the World Summit on Sustainable Development, with the mission to mainstream ecoagriculture. She listed the Conference objectives, namely to: promote knowledge-sharing; advance understanding of ecoagriculture principles and strategies; enable participants to identify and pursue actions and collaborative partnerships; develop the foundation for a strategic plan of action for Ecoagriculture Partners; and produce the *Nairobi Declaration on Ecoagriculture*.

ECOAGRICULTURE INNOVATIONS-CHALLENGES

MOVING FORWARD: This session took place on Monday afternoon and was moderated by Dorota Metera, World Conservation Union (IUCN). Mohamed Bakarr, ICRAF, introduced the draft *Nairobi Declaration on Ecoagriculture*. He said the Declaration aims to capture the "essence of the Conference" and share this understanding with the international community.

Gladman Chibememe, Chibememe Earth Healing Association (Zimbabwe), presented the outcomes of the two-day Community Shamba of local and indigenous communities, held from 24-25 September 2004. He explained that the Community Shamba was created to discuss perspectives and innovations regarding: the success of local involvement in ecoagriculture; sharing knowledge, experiences, innovations and practices; and informing and influencing policy. Over 60 community ecoagriculture innovators from 24 countries participated in the Community Shamba, with discussions focusing on: key values and principles of ecoagriculture; actionable activities for capacity building; and measures to create an enabling environment for community-level ecoagriculture. On the values and principles of ecoagriculture, he said participants to the Shamba agreed that these must: appreciate and integrate local and indigenous knowledge systems and technical skills; address the need to recover and conserve biodiversity, including the diversity of crops; recover and promote endemic species; contribute to family food security and seed diversity and sovereignty; and strengthen the social and cultural fabric of local communities. On actionable activities for capacity building, he said participants highlighted the need for exchanging good practice, creating networks of communities, and strengthening local institutions. On creating an enabling environment, Chibememe said participants proposed that ecoagriculture practices: build on existing community initiatives, including strengthening existing institutions and taking advantage of the inherent internal strengths of communities; create incentives for communities, such as sustainable financial mechanisms; promote win-win solutions for the environment and

communities; ensure the participation of women and indigenous peoples organizations in ecoagriculture; and promote participatory practices, networking, partnerships and collaboration.

Bernward Geier, Director for International Relations, International Federation of Organic Agriculture Movements (IFOAM), reported on the third IFOAM meeting on Biodiversity and Organic Agriculture, held in Nairobi from 24-26 September 2004. He said participants agreed that organic agriculture and agroecology are synonymous, and that such practices do not use chemical pesticides, fertilizers or genetically modified organisms (GMOs). He stressed the need to form partnerships with local conservation and consumer groups, promote organic agriculture as a tool for biodiversity conservation and food security, and include organic farming in national biodiversity plans.

In a discussion period, participants discussed: the high prices and premiums placed on organic products; the protection of organic agriculture from the current mass-based system of agriculture; the need to protect small-scale and mountain farmers, as well as indigenous products from the current market forces driven by large scale agricultural producers; and the need to create a bridge from "agriculture to dining culture."

ECOAGRICULTURE – STATE OF THE ART: This session took place on Tuesday morning and was moderated by Dennis Garrity. Louise Buck and Thomas Gavin, Department of Natural Resources, Cornell University, presented the outcomes of their assessment on the state of international research on ecoagriculture. Buck said the research was based on three core concepts underpinning ecoagriculture, namely: agriculture productivity; economics and rural livelihood; and wild biodiversity. Gavin said that the research outcomes included the recognition that: visions for ecoagriculture have scientific foundations; claims about the benefits of ecoagriculture have scientific merits, but the trade offs are not always transparent; and long-term research at a landscape scale is needed.

Sandeep Sengupta, Forest Landscape Restoration Programme, IUCN, outlined the role of forest landscape restoration (FLR) as a tool for developing integrated land-use and landscape management systems that meets human needs and biodiversity and ecosystem conservation. He said FLR emerged due to the failure of conventional planning models and stressed that it emphasizes a people-centered, landscape scale approach to decision-making and management.

Minu Hemmati, The Seed Initiative, explained that the Initiative provides tailor-made support to locally-driven partnerships on sustainable development. She stressed the importance of the involvement of all stakeholders based on democratic principles for successful partnerships. She listed the advantages of partnerships, including quality, credibility and likelihood of implementation. Hemmati explained the social psychology of partnerships, noting that clear principles, shared ownership and knowledge build trust and strong relationships.

In response to the presentation from Buck and Gavin, a participant highlighted the need to address the benefits of ecoagriculture for agricultural productivity, while another underscored the important role of ecoagriculture in achieving the Millennium Development Goals (MDGs). One participant stressed the importance of prioritizing and identifying biodiversity-related elements that need to be protected in agricultural systems. In response to Sengupta's presentation, one participant underscored the need to respect the knowledge and practices of local people. Another participant

stressed the importance of adaptive management and underscored that forest restoration be included under the ecoagriculture umbrella. In response to the presentation from Hemmati, participants highlighted the need to develop a learning alliance to share knowledge and reach out to policy makers, address the costs of information sharing, and consult stakeholders to prioritize knowledge sharing.

FARMING FOCUS GROUPS

On Monday morning and afternoon, ten farming focus groups met in parallel to discuss innovations contributing to ecoagriculture and identify critical actions for the way forward.

The group on water systems management identified the following critical issues: ensuring diversity in agricultural systems; sustaining the ecological condition of the natural resource base; ensuring technological improvements, including promoting "more crop per drop," developing appropriate cost effective technologies, and creating incentives for water productivity; maximizing market opportunities for people and the environment; minimizing the negative externalities of market systems; and creating systems for water allocation among environmental, social, and agricultural demands.

The group on temperate cropping systems identified the following critical issues: supporting policies that include ecosystem values; identifying viable ecosystems for temperate zones; transferring knowledge and management strategies for ecoagricultural systems; building consumer support and raising awareness for more ecoagriculture friendly products and influencing consumer patterns; and proactively promoting ecoagriculture in "new agriculture frontiers."

The group on humid/sub-humid tropical cropping systems identified the following critical issues: building a database of ecoagriculture initiatives; scaling-up ecoagriculture effectively; protecting traditional methods with patents and intellectual property rights; preventing loss of traditional knowledge; defining ecoagriculture; and identifying mechanisms to achieve ecoagriculture.

The group on dryland tropical cropping systems identified the following critical issues: increasing farmers' control over their seeds; raising awareness of all stakeholders on the synergies between agricultural production and the environment; linking culture and agriculture; creating linkages and synergies between agriculture and natural resource management; implementing legislation to support a shift to ecoagriculture; making ecoagriculture rewarding and advantageous; increasing incomes and market profitability; adding value to local resources and products; increasing productivity by using alternative methods; and defining ecoagriculture.

The group on pastoral and ranching systems identified the following critical issues: establishing a strategic plan and setting objectives by synthesizing knowledge and establishing long-term objectives; raising awareness at all levels; improving regulations and institutions to support community management; improving regulations and institutions to support community management by creating incentives for pastoralists to adopt ecoagriculture friendly practices; and ensuring accountability, better monitoring and enforcement.

The group on intensive dairy and meat production systems identified the following critical issues: measuring the landscape impact of ecoagriculture practices; raising awareness on the connection between policies and practices; creating incentives for environ-

mental practices; adopting a global policy perspective for ecoagriculture; and raising awareness of environmental concerns related to increased demand for livestock products.

The group on agriculture and fisheries identified the following critical issues: including aquatic biodiversity, aquaculture and fisheries in ecoagriculture practices; highlighting the role of water in agriculture beyond irrigation; reviewing water management planning and investment to assess their impacts on aquatic biodiversity and fisheries-dependent communities; researching sustainable aquaculture; and securing the livelihoods of fisherfolk and other communities dependent on aquatic biodiversity.

The group on perennial crop systems, agroforests and homegardens identified the following critical issues: developing research and development priorities for ecoagriculture; verifying the scientific basis of ecoagriculture's contribution to the economy, society, and the environment; developing more sustainable and profitable land-use systems; mainstreaming biodiversity conservation; promoting education, training and participatory approaches on best agricultural practices; increasing awareness of ecoagriculture across all sectors; and promoting institutions and policies to encourage the adoption of ecoagriculture principles and practices.

The group on mountain agroecosystems identified the following critical issues: defining ecoagriculture; bridging the gap between theory and practice; filling the gaps in ecoagriculture promotion practices; capitalizing on small farm ecoagriculture; balancing economic and conservation goals; creating incentives for the diversification of crops; changing consumers' behavior; and empowering mountain communities.

The group on forest landscape mosaics identified the following critical issues: addressing the bias of science-based agricultural systems; ensuring a landscape level perspective which includes community participation; strengthening institutional arrangements at community level; reflecting community interests in policies and programmes; addressing weak incentive systems and inappropriate land tenure policies; establishing feasible markets for ecosystem services; limiting the impact of trade liberalization and globalization on smallholder products; and reducing the cost of certification to smallholders.

THEME GROUPS

On Tuesday, participants engaged into four parallel Theme Group sessions. *Sustainable Developments* covered Themes 1 and 2 and based its report of Theme 4 on information provided by UN Development Programme.

THEME GROUP ONE: UNDERSTANDING ECOAGRICULTURE: Biodiversity components in agricultural land use systems: Kwesi Atta-Krah, International Plant Genetic Resources Institute, presented on managing genetic diversity in agroecosystems. Recalling that agriculture and wild biodiversity conservation are not mutually exclusive, he outlined the advantages of sustainably using genetic diversity in agriculture. He underscored the linkages between agrobiodiversity and biodiversity, and stated that agriculture biodiversity is an "insurance policy against loss of production." He called for: including agrobiodiversity into wider biodiversity considerations; considering the effects of agricultural practices on wild biodiversity; developing landscape management methods that optimize diversity; and negotiating global ecoagriculture partnerships projects.

Dino Martins, African Pollinator Initiative and Environmental Liaison Centre International, presented on the role of pollinators in preventing losses and promoting persistence. Noting that a third of all food production is dependant on animal pollinators, he said that pollinators are under various threats. He explained that pollinators affect seed and fruit yields and quality, noted that pollination systems are linked to biodiversity, and called for academic investment in the taxonomy of pollinators and training of taxonomists. He listed challenges faced, including: lack of awareness on pollinator conservation, inadequate legislation and law enforcement; and insufficient knowledge on managing pollinators.

Roger Leakey, James Cook University, presented on domesticating tree crops and marketing novel crops for ecoagriculture. He explained the process of domestication and mentioned some of its objectives, including to: support the livelihood of farmers in relation to the MDGs; improve environmental, social and economical outputs; and diversify the farming system. He said the challenge was defining the role of agroforestry in biodiversity conservation and providing livelihoods while decreasing environmental degradation.

Lee de Haan, The Land Institute, addressed the development of perennial grains for ecoagriculture systems. He described the disadvantages of annual crops and said perennial grain breeding programmes provided a better alternative. He listed the obstacles to perennial grain breeding, including the time required for perennial grain breeding and the opposition from annual grain stakeholders. He called for: reviving the International Rice Research Institute's perennial rice programme; exploring the possible use of perennial grains in the tropics; and initiating perennial grain breeding programmes worldwide.

Enhancing biodiversity in agricultural land use systems:

Edmund Barrow, IUCN, explained how pastoralism makes the best use of natural resources in space and time, manages risk associated with drylands, enhances resilience, and is compatible with wildlife. He warned against ill-informed myths about pastoralism, including that it is archaic, disruptive, results in land degradation, and makes little contribution to the national economy. He noted the Global Environment Facility's (GEF) World Initiative for Sustainable Pastoralism and the contribution of pastoralism to the MDGs and the 2010 biodiversity goals.

THEME GROUP TWO: MANAGING ECOAGRICULTURE: Integrated Management at a Landscape Scale:

Tom Tomich, ICRAF, outlined the role of ecosystem services in landscape mosaics in tropical forest margins. He highlighted one of the main challenges as identifying innovative policies, institutions and technologies that can reduce poverty without decreasing environment services. In outlining a future vision for landscape mosaics, he underscored the need for: diverse landscapes with increased wild species; tenure reform; access to resources and expanding livelihoods; and education and awareness.

Meine van Noordwijk, ICRAF, addressed the issue of managing agricultural landscapes for watershed services in South East Asia. He outlined a ten-step management approach including: undertaking landscape appraisals; addressing natural resource flows; characterizing land-use systems and landscape mosaics; addressing trade-offs; analyzing existing land-use patterns from a stakeholder perspective; and negotiating solutions, including monitoring and compliance measures.

David Molden, International Water Management Institute, addressed the management of biodiversity in irrigated landscapes. He stressed the importance of: ensuring water productivity, including growing more food with less water; using low-cost technologies that can improve water productivity; maintaining habitat integrity and connectivity; promoting community awareness; and ensuring environmental flows. Among the challenges, he identified the need to manage multiple water uses and balance irrigation requirements with environmental needs.

Practice and Implementation: Howard-Yana Shapiro, Mars Incorporated, addressed lessons learnt in developing cocoa ecoagriculture. He identified four key elements of functional biodiversity: diversity of vegetation; permanence of various crops; intensity of management; and the extent of isolation from natural vegetation. He stressed that ecoagriculture can serve as a “springboard” for building sustainability, protecting biodiversity, eliminating poverty, correcting ecosystem degradation and soil erosion, and reversing declining livelihoods.

Götz Schroth, Center for International Forestry Research, presented on the role of agroforestry in biodiversity conservation in the tropics. The challenges he identified included: maintaining and promoting biodiversity friendly traditional agroforestry practices against growing pressure to intensify production; preventing farmers from using improved incomes to convert more land to forests; and creating a conservation ethic and compensating farmers for not killing wild species.

Mohamed Said, International Livestock Research Institute, addressed the role of pastoralists as ecoagriculture managers. He identified the linkages between biodiversity, ecosystem process, and ecosystem goods and services, and outlined research findings on the coexistence between people and livestock in East Africa. The challenges he identified included: linking ecological field studies and regional and continental scale studies to develop an appropriate policy framework; and developing policies to reverse negative trends and enhance existing synergies between people and livestock.

Monitoring and Impact Evaluation: Tim Reed, The Nature Conservancy (TNC), addressed measures to manage ecoagriculture and biodiversity at the landscape level with a focus on audits undertaken by TNC on its agricultural projects. He said the audits aimed to measure project impact, effectiveness and efficiency. Among the results of the audit, he highlighted the benefits of working directly with farmers, noted that farmers require incentives to provoke and maintain changes, and stressed that projects demonstrating new techniques can lead to policy changes.

Aaron Dushku, Winrock International, highlighted innovative tools for the quantification of ecoagriculture, focusing on the use of multicriteria analyses, statistical sampling techniques for project measurement and monitoring, and the spatial characteristics of the landscape for habitat assessments.

THEME THREE: VALUING ECOAGRICULTURE FOR LIVELIHOODS AND BUSINESS: Presentations in this Theme Group focused on examining evidence of livelihood benefits and economic profitability of existing ecoagriculture systems relative to mainstream systems. They also focused on exploring institutional changes in agribusiness, the food industry and payments for ecosystem services that could shift incentives in favor of ecoagriculture, and the implications for economic, business and rural development policy.

THEME FOUR: MOBILIZING COMMUNITY ECOAGRICULTURE: Participants heard presentations from Farhad Mazhar, Policy Research for Development Alternatives (Bangladesh), and Peryapatan Satheesh, Deccan Development Society (India), that demonstrated community understanding of ecoagriculture, highlighting peer-to-peer learning initiatives and possibilities offered by ecoagriculture initiatives for communities. The presentations highlighted key areas where strategic partnerships between communities and researchers, policymakers, and community-led business initiatives are required. Erick Fernandez, World Bank, and Walter Lusigi, GEF, presented on the challenges in creating policy and institutional frameworks to support community-led ecoagriculture. The presentations addressed problems relating to land degradation, drylands, unsustainable resource exploitation as well as social, policy and institutional challenges that hinder investment in land and ecosystem restoration. During the discussions participants examined the values and principles of community engagement in ecoagriculture, including capacity development needs and the types of interventions required to support local level action. In the evening, the Equator Initiative hosted a Community Celebration to explore how ecoagriculture provides innovative solutions to conserve biodiversity, while helping eradicate poverty and enhance social and cultural objectives, with participants sharing experiences from a number of countries, including Honduras, India, Kenya, Mongolia, the Philippines and Senegal.

THINGS TO LOOK FOR TODAY

THEME GROUP ONE: This group will meet all day in the main conference hall to continue discussions in the subgroups on: agro/wild biodiversity conservation and enhancement in ecoagricultural landscapes; ecosystem services and restoration in ecoagricultural landscapes; and cultural, institutional and policy determinants in ecoagriculture innovations, adaptations and impact.

THEME GROUP TWO: This group will meet all day in the board room to continue discussions in the subgroups on: designing and managing agricultural landscapes for production and conservation; institutions for ecoagriculture planning and coordination at the landscape scale; and methods and strategies for monitoring ecoagriculture at a landscape scale.

THEME GROUP THREE: This group will meet all day in the lawn tent to continue discussions in the subgroups on: measuring and monitoring progress towards ecoagriculture; incentives for ecoagriculture-innovations in product markets; and incentives for ecoagriculture-developing markets for ecosystem services.

THEME GROUP FOUR: This group will meet all day in the Community Shamba to continue discussions on mobilizing community ecoagriculture.

NAIROBI DECLARATION: The second draft of the *Nairobi Declaration on Ecoagriculture* will be circulated to Conference participants during the day. A meeting to finalize the Declaration will tentatively be held on Thursday evening.

ECOAGRICULTURE PARTNERSHIPS AND PROJECTS: An updated version of the list of ecoagriculture partnerships and projects is available from the help desk.

SUSTAINABLE DEVELOPMENTS' REPORT: *Sustainable Developments'* final report of the International Ecoagriculture Conference and Practitioners' Fair will be available on Monday, 4 October at <http://www.iisd.ca/sd/sd/eac/>