



ANNUAL REPORT 2012

Promoting Agricultural research
for Development and Rural Innovation
in West and Central Africa



CORAF/WECARD
Annual Report 2012

Promoting Agricultural Research for Development
& Rural Innovation in West & Central Africa

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Above: *President Idriss Deby Itno of Chad at an exhibition during 2012 CORAF/WECARD Agriculture Science Week.*

Below: *Some participants at the Agriculture Science Week visiting the shrinking Lake Chad*

Contents

Foreword	8
The CORAF/WECAR Four Result Areas	10
Technical Research, Policy and Effective delivery	12
Result 1: Appropriate technologies and innovations developed	14
Result 2: Strategic decision-making options for Policy, institutions and markets developed	27
Result 3: Sub-regional agricultural research system strengthened and coordinated	29
Result 4: Demand for agricultural knowledge from clients facilitated and met	31
Enhancing Governance & Organization of Regional Agricultural Research for Development	35
The CORAF/WECARD 10th General Assembly	41
Activities of Scientific and Technical Committee, 2012	48
Achievements of the Executive Secretariat 2012	49
Strengthening Partnerships for Regional Agricultural Research for Development	51
Challenges CORAF/WECARD faced in 2012	57
Strategic Consultations led by CORAF/WECARD in 2012	58
CORAF/WECARD's Financial Outlook	60
Conclusion	64

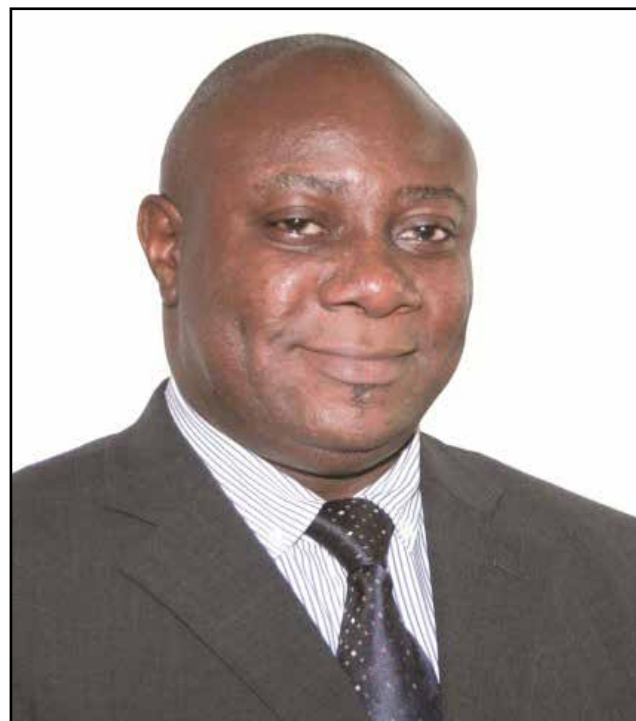
CORAF/WECARD Publications	65
CORAF/WECARD Management Organs	70
CORAF/WECARD Personnel 2012	77
Acronyms & Abbreviations	80



Foreword



Dr Ibet Outhman Issa
Chair Governing Board



Dr Harold Roy-Macauley
Executive Director

We are pleased to present this CORAF/WECARD Annual Report for 2012. This report highlights the major achievements in 2012 by CORAF/WECARD in collaboration with its partners, towards the realization of the four (4) result areas of the CORAF/WECARD Operational Plan 2008-2013. In 2012 CORAF/WECARD activities covered three (3) broad categories, namely: a) Technical Research - using an integrated approach based on systems and commodities, but em-

ploying new holistic and participatory methodologies, b) Policy Research - identifying and responding to key issues preventing achievement of the improved markets, competitiveness and productivity through research, and c) Effective and Efficient Delivery - improving information and knowledge management and access, including research into mechanisms and methodologies. The various programs and projects contributed more or less to each of the four result areas of the Operational Plan.

CORAF/WECARD Secretariat acknowledges the support and participation of its stakeholders, notably the various components of the national agricultural research systems (NARS) – the national agricultural research institutions and universities, the extension services, farmers' groups, non-governmental organizations, private sector groups. The advanced research institutes (ARIs) and the international agricultural research centers (IARCs) also played significant roles in the realization of the results reported for 2012.

The Forum for Agricultural Research in Africa (FARA), the continental umbrella organization continued to play its special functions in providing guidance as CORAF/WECARD and its partners coordinated implementation of CAADP Pillar IV in 2012.

The Secretariat particularly recognizes the contribution of CORAF/WECARD's development partners, namely the World Bank, European Commission (EC), the governments of the United Kingdom, United States, Australia, Canada, Spain and Denmark towards financing activities that produced the achievements reported for 2012. The oversight roles of the CORAF/WECARD Governing Board

in 2012 were particularly instrumental to the achievement of the results presented in this report. The Board provided needed support and facilitated the Secretariat's functions. The Scientific and Technical Committee scrutinized the scientific quality and deliverables of projects and programs implemented during 2012.

The continued political and institutional support from the Commission of the Economic Community of West African States (ECOWAS), the Economic Community of Central African States (ECCAS), the Union Economique et Monétaire Ouest-Africaine (UEMOA), the Commission de la Communauté Economique et Monétaire de l'Afrique Centrale (CEMAC), and the NEPAD Planning and Coordinating Agency (NPCA) provided the needed leverage to achieve the results in this 2012 report. The entire staff of the CORAF/WECARD Secretariat and the various regional project coordinators played invaluable roles in the realizations of 2012.

The outputs from the implementation of the CORAF/WECARD 1st Operational Plan were reported in a manner which appropriately sets the stage for the development of the 2nd Operational Plan 2013-2018.

CORAF/WECARD Four Result Areas

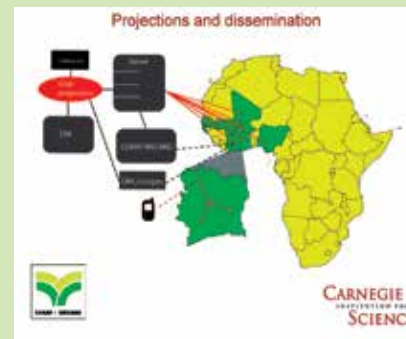


CORAF/WECARD Four Result Areas

The CORAF/WECARD Operational Plan 2008-2013 was designed within the context of promoting the generation and use of agricultural technologies as described in CAADP Pillar IV. In 2012, CORAF/WECARD continued its pursuit of improving agricultural research, technology dissemination and adoption with continued focus on the following four results of the Operational Plan:

- 1. Appropriate technologies and innovations developed;**
- 2. Strategic decision-making options for policy, institutions and markets developed;**
- 3. Sub-regional agricultural research system strengthened and coordinated; and**
- 4. Demand for agricultural knowledge from target clients facilitated and met.**

In delivering these results during the 2012 period, a series of regional research and technology up-take projects were launched by CORAF/WECARD. Implementation of these projects involved technical research, policy and market issues, capacity strengthening and knowledge management with the inclusion of broad-based stakeholders – an approach termed integrated agricultural research for development (IAR4D).



Actively mobilizing partners and actors towards the delivering of the four results

Technical Research, Policy and Effective delivery



Enhancing access to markets: a yam market

The designation of CORAF/WECARD as the technical arm by ECOWAS, ECCAS, CEMAC and UEMOA enhances CORAF/WECARD's advocacy for increased investments in agricultural research for development in West and Central Africa.

The **first category** of CORAF/WECARD Programs, the Technical Research Programs, use integrated approaches based on systems and commodities, and deploy new holistic and participatory methodologies referred to as Integrated Agricultural Research for Development (IAR4D).

The technical research programs are:

- i. Livestock, Fisheries and Aquaculture**
- ii. Staple Crops**
- iii. Non-Staple Crops**
- iv. Natural Resources Management,**
- v. Biotechnology and Biosafety.**

The **second category** of Programs which CORAF/WECARD continued to implement in 2012 is the Policy, Markets, Trade, Institutions, Socio-economic Research Program. This program responds to the demand of policy and decision-makers for information on how to improve policy, and create the enabling environment for high level sustained economic growth. This goal is being pursued by the following CORAF/WECARD Programs :

- vi. Policy, Trade, Markets, Institutions and Socio-economics.**

This program, working in tandem with the technical research programs of CORAF/WECARD, focused attention on developing strategic decision making options for policy, institutions and markets, and strengthening the regional agricultural research systems relevant to policy.

The **third category** of Programs is the Effective Research Delivery Programs. The programs in this category also constitute the core functions of CORAF/WECARD; they are :

- vii. Capacity Strengthening (and coordination), and**
- viii. Knowledge Management**

These two programs not only promote the exchange of knowledge and information between technical programs, but also between the policy, delivery and technical aspects of CORAF/WECARD activities.

Technical Research, Policy and Effective delivery



Tackling Striga infestation in the Sahel

A **fourth category** of CORAF/WECARD Programs is the Special Programs which are cross-cutting with distinct characteristics.

These are:

- ix. **West Africa Agricultural Productivity Program (WAAPP)**
- x. **Central African Agricultural Productivity Program (CAAPP)**
- xi. **West Africa Seed Program (WASP)**

A total of 52 regional competitive and commissioned projects from these programs were implemented in 2012 as part of the Operational Plan, 2008-2013. Each of these projects contributed to each of the four result areas.

The projects addressed technological and organization issues on productivity, post-harvests, policy and markets, capacity strengthening and knowledge management throughout West and Central Africa.

Result 1



Nomadic cattle drinking troughs in the Sahel

CORAF/WECARD's technology development approach represents a shift to ensure responsiveness to demand as well as adaptation.

The IAR4D paradigm requires multi-stakeholder and multi-level engagement, which requires carefully managed co-ordination.

CORAF/WECARD was established to do this in order to minimize duplication of effort, and optimize synergies.

Appropriate technologies and innovations developed

Highlights of Achievements

The CORAF/WECARD CAADP-aligned projects being implemented in the West and Central Africa delivered the following outputs in 2012.

- Value chain approach in staple and non-staple crops, livestock, fisheries & aquaculture, and natural resources management research-production-consumption continuum was being promoted in the region during the period. This has been a major shift in CORAF/WECARD's research in which knowledge generation was the final objective to seeing research outputs as a means to achieving change. The new approach involved the development of innovations, and the focus of technology generation with farmers and other users of technology in the value chain. The IAR4D which integrates the perspectives, knowledge and actions of different stakeholders around a common theme was promoted as the major hub for the implementation of all regional projects.
- Improved integrated soil fertility management techniques being deployed by CORAF/WECARD projects are improving crop yields in farmers' fields in West and Central Africa. These techniques include the integration of ruminants and poultry and fertilizers in cropping systems, and the integration of poultry and piggery in aquaculture systems.
- CORAF/WECARD continued to manage a consortium of partners including NARS of Nigeria and Niger, farmers organizations, the private sector,



Promoting research aimed at reducing physical drudgery of labor

CBOs, NGOs, extension & advisory services, IITA, IFDC ICRISAT, and other partners in smallholder farmers' fields in the Kano-Katsina-Maradi (KKM) Pilot Learning Sites (PLS) of the Sub-Saharan African Challenge Program SSA-CP led by the Forum for Agricultural Research in Africa (FARA). Interventions introduced improved options of integrated soil fertility management in Nigeria and Niger. Thus improved varieties of maize, soybean, cowpea, pearl millet, improved land preparation, soil water conservation techniques, plant population density, and efficient use of fertilizers are recommended to farmers. These options are aimed at boosting productivity of the farms in the Pilot Learning Sites.

- A regional project designed to promote technologies for an integrated management of plantain in farmers' fields in Cameroon, Congo, Democratic Republic of Congo, Benin and Ghana was launched in 2012. The objective of encouraging scientists to work directly with farmers, as part of the IAR4D principles, was to consolidate the confidence of the farmers in the use of proven technologies, specifically disease and pest resistance varieties, IPM and integrated soil fertility management. The approach also aimed at opening new avenues for research scientists to assist farmers in formulating demands for technologies which enhance productivity.
- In 2012, CORAF/WECARD launched the West Africa Seed Program – the Alliance for the Seed Industry in West Africa (ASIWA). The Program objective is to unlock the potentials of improved seeds for food and nutrition security in the region. Seeds are the carriers of new technologies, and the cheapest input in the crop production process, therefore CORAF/WECARD and its partners embarked on expanding production and supply of improved certified seeds of openly pollinated varieties and hybrids for the

Result 1



Promoting integration of crops with trees.

The focus for technology development is smallholders and pastoralists, as well as other stakeholders, such as large scale and commercial producers.



Improving indigenous practices.

benefit of farmers in the region. The plan is to improve staple crops seeds supply from the current 12% to 25% in the next four years to enhance crop productivity, food supply and self-sufficiency in the region. Partners in this program include: ECOWAS, UEMOA CILSS, AGRA-PASS, national, regional and international seed and fertilizer enterprises, the NSTAs, AFSTA, seed quality control agencies, the Seed Science Centre of Iowa State Universities, IITA, ICRISAT and AfricaRice, NARS, ROPPA, Extension Services; National Seed Services; National Variety Release Committees, National Seed Quality Control and Certification Agencies, Plant Protection and Regulatory Services, and Universities.

- CORAF/WECARD worked with its partners in 2012 in promoting smallholders' uptake of improved 12 sorghum varieties tolerant to Striga, the witch-weed, in Burkina Faso, Mali and Senegal. The use of improved sorghum varieties is expected to reduce the incidence and threats of sorghum crop failures, thus creating opportunities for government extension services to out-scaling this technology. CORAF/WECARD partners in this project include Institut d'Economie Rurale (IER), Mali; l'institut de l'environnement et de recherches agricoles (INERA), Burkina Faso; and Institut Sénégalais de Recherches Agricoles (ISRA), Senegal, and ICRISAT. The project activities involved working directly with several farmers' groups, and community-based organizations.
- The availability of yam planting materials remains a challenge for yam production in the region. In its To contribute to providing seed-yam supply chain in the region, the CORAF/WECARD project on yam miniset production in 2012 actively encouraged the development of SME on seed-yam production. Farmers and SMEs were trained in yam miniset and vine-cutting techniques to intensify the multiplication of



Enhancing artisanal fisheries.

CORAF/WECARD activities are contributing to reversing the trend of inadequate stakeholder participation in the agricultural research for development sector thus promoting sustained management of social and environmental resources.



Enhancing productivity of local ruminants.

33 yam varieties for smallholder farmers in Ghana, Togo and Nigeria. Training also included techniques and use of improved storage techniques for the seed yams and yam tubers. The high involvement of female entrepreneurs in seed yam marketing, extension and NGOs was particularly remarkable.

- To improve post-harvest quality and packaging of rice, sorghum, millet and cassava products, the CORAF/WECARD commissioned project on post-harvests, organized several training events and internships for post-harvest actors to strengthen capacity in improved techniques. The project involves partners from Nigeria, Togo, Ghana, Benin, Liberia, Mali, Senegal, Burkina Faso and Niger. The trainings and internships were led by the Songhai Centre, Cotonou, Benin; Institut technologie Alimentaire, Senegal; L'Institut d'Economie Rurale, Mali; L'Institut de Recherche en Sciences Appliquées et Technologies (IRSAT) du Burkina Faso; IITA ; National Root Crops Research Institute (NRCRI), Nigeria; l'Institut National des Recherches Agricoles (INRAB) du Bénin; Africa-Rice; CERNA/UAC-FSA, Benin; Centre Béninois de Normalisation et de Gestion de la Qualité; Council for Scientific and Industrial Research – Food Research Institute (CSIR-FRI), Ghana; and l'Institut Togolais de Recherche Agronomique, Le Groupement Lakhalkaney (GL) du Niger. Reduction of pests in stored grains was also a major focus in the post-harvests outputs by CORAF/WECARD and its partners in Senegal, Cameroon, Guinea and Niger.
- The agreement secured with the African Agriculture Technology Foundation (AATF) is facilitating CORAF/WECARD's up-scaling of Bt-cowpea in the region. In 2012, testing and seed production of the varieties of Bt-cowpea was continued, and socio-economic and environmental impacts analyses were conducted in Burkina Faso, Nigeria, Mali and Togo. Furthermore,

Result 1



Promoting gender in agricultural research.

CORAF/WECARD is fostering sustainable development of holistic productivity enhancing practices that are socially and environment friendly.



Promoting research internships.

CORAF/WECARD contributed to the strengthening of human and institutional capacities, and the legal environments required for the safe deployment and effective management of GM crops in these countries.

- In 2012, CORAF/WECARD continued to effectively coordinate multilateral partnerships leading to the uptake of advanced cultural techniques in the preservation, multiplication and distribution of African Cassava Mosaic Virus (ACMV) free cassava cuttings in Benin, Togo, Ghana, Sierra Leone and Liberia in partnership with IITA. These techniques are aimed at reducing the incidence of cassava diseases caused by the virus, and increasing productivity of the crop. The techniques include use of improved tissue culture and greenhouse acclimatization of tissue cultured plants. CORAF/WECARD also effectively coordinated the evaluation and deployment of rice varieties with rice yellow mottle virus (RYMV) resistant gene in parts of West Africa (Burkina Faso, Côte d'Ivoire, Ghana, Liberia, Nigeria, Sierra Leone) in partnership with the Africa Rice Center. Production and distribution of certified rice seeds was also intensified.
- The CORAF/WECARD project on evidence-based optimization of cocoa agro-forestry systems mobilized national and international partners in support of sustainable cocoa production in Cameroun, Côte d'Ivoire and Ghana. In 2012, the project addressed issues of farming practices and livelihood strategies of producers, and the factors which drive cocoa productivity in agro-forestry systems in the region.
- The continued importation of dairy products and its implication as a significant source of foreign exchange loss in the region led CORAF/WECARD to commission a project on the milk sub-sector. This project objective is to identify and address gaps in



Crop diversification improves farmers income.

High value crops produced by regional farmers are now introduced into supermarket chains



Fresh tomatoes in a regional supermarket.

the sub-sector's value chain to improve productivity and competitiveness of dairy products. This project exploited the relatively large proportional contribution of the livestock sub-sector to the GDP of the countries in the Sahel to increase milk production. Partners include the following: Ecole Inter-Etats des Sciences et Médecine Vétérinaires (Dakar, Senegal); Agronomes et Vétérinaires Sans Frontières (Senegal); Ecole National Supérieure d'Agriculture (Senegal); Institut Sénégalais de Recherches Agricoles; Institut de l'Environnement et des Recherches Agricoles (Burkina Faso); Association pour la Promotion de l'Élevage au Sahel et en Savane (in Burkina Faso and in Cameroon); Université Abdou Moumouni (Niger) ; and, Institut Universitaire des Sciences et techniques (Chad).

- CORAF/WECARD promoted integrated production systems in several regional collaborative projects. In 2012 projects included integrated aquaculture-based on rice and poultry production; sustainable intensification of crop-ruminant (goat and sheep) production systems. These systems were consistently promoted as important resilient and sustainable farming system in the more variable and changing climate. In 2012 a combination of natural resources management and staple crops promoted improved cultural techniques in Ghana, Mali, Gambia and Benin. This initiative enhanced the indigenous knowledge and practices of rural communities for improved productivity in integrated systems, and the socio-economics of farmers in crop-small ruminant production.
- Integrated aquaculture with rice and piggery system in Sierra Leone, Nigeria and Cameroon were promoted. Activities in 2012 were based mainly on the need to reap the high potential benefits in income generation from integrated aquaculture systems of

Result 1



rural economies, and the potential of the system to act as a lever in the reduction of community environmental and social risks. Adaptable technologies compatible with local experiences coupled with participatory learning through on-farm demonstrations of improved production management techniques constitute the major approach to project implementation. Participatory extension schemes are assisting farmers in adapting enhanced techniques for integrated aquaculture development.

- In 2012 CORAF/WECARD launched a project on the promotion of integrated soil fertility management in Benin, Burkina Faso and Togo. The project focus is specifically up-scaling new techniques and innovations in soil fertility management and soil water use efficiency for improved and sustainable crop productivity. New techniques and innovations in soil fertility management and soil water use efficiency were adopted for improved and sustainable crop productivity.
- Production intensification in smallholder fish farming schemes help in reducing exploitation of marine resources. Projects on techniques in intensifying fish farming were promoted by CORAF/WECARD in 2012. The projects are encouraged the adoption of recent innovations in fish production management, processing, storage and marketing in some coastal communities in Côte d'Ivoire, Benin and Cameroon. The partners include: Université de Douala, Cameroon; Université de Bouake, Côte d'Ivoire; Université de Parakou, Benin ; Aquaculture et Développement Durable (NGO), Camaroon ; APDRA, France ; CIRAD, France, ISTOM, France ; and ETC EcoCulture, Holland.
- CORAF/WECARD launched a regional project to promote integrated cereal-livestock-tree systems for sustainable land use in the Sahel of West Africa. The



Regional research aimed at Sustaining the region's leadership in cocoa production

CORAF/WECARAD's commissioned research projects on non-staple crops encourages diversification of sources of revenue for the farmers and rural communities

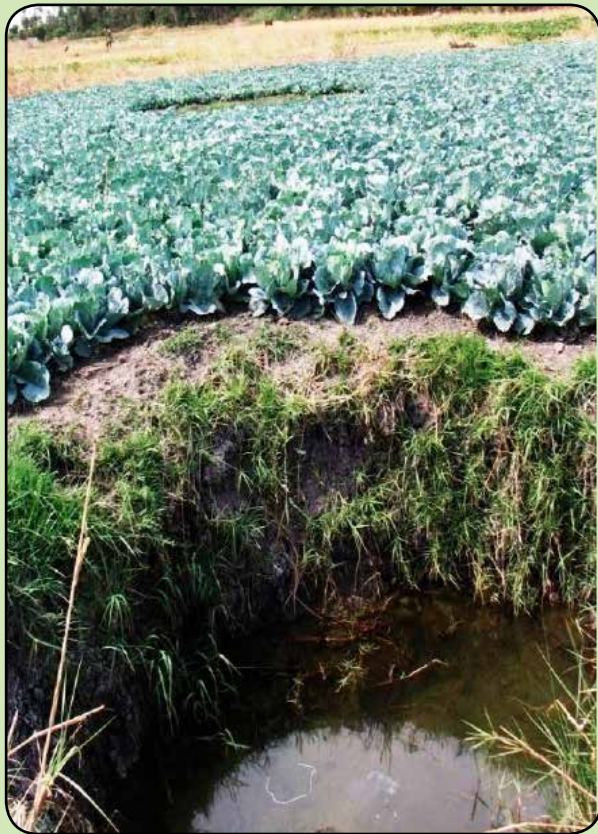


Increased use of improved varieties are enhancing productivity of the 'white gold'

project associates ruminants with trees in pre-existing agricultural production systems (agro-silvo-pastoral systems), thus enhancing the sustainability of the system. This project evaluated synergistic production interventions in Cameroon, Mali, Niger and Senegal in 2012. The project activities also included developing and validating farming systems models as tools for predicting and designing intervention options on crop-livestock-tree systems in the dryer areas of the region. Partners on this project include: INRAN, Niger; IER, Mali; INERA, Burkina Faso; ISRA, Senegal; ILRI, IRAD, Cameroon, Nairobi; WorldAgroforestry Centre (ICRAF), Mali and CSIRO, Australia.

- CORAF/WECARD promoted the building of resilience into regional agricultural production systems. In the semi-arid zones of the region, mixed milk-vegetable production systems designed to capture lessons which permit scaling-out and intensification of an integrated smallholder dairy and vegetable production were promoted for uptake by actors in the value chain. The intent was to diversify sources of rural communities' revenue, increase farm household income and food security, and also enhance resilience of the communities in Togo, Mali, and Niger.
- In 2012 CORAF/WECARD commissioned a regional project to promote new innovations in the integrated management of cotton insect pests in the region with a specific focus on the cotton production zones in Benin, Burkina Faso, Côte d'Ivoire, Mali, Senegal and Togo. This action research which was conducted in farmers' fields, and in partnership with cotton processing companies was aimed at promoting new innovations in integrated pest management which involve new, more rational, pest control programs that adjust treatments to the damage thresholds of the pest (a staggered targeted control approach). Production of decision-making tools for

Result 1



Providing appropriate irrigation water for vegetable production in peri-urban areas remains a challenge.

farmers, industry and policy makers were some important goals of the project. The following partners have been successfully mobilized for this initiative: CNRA, Côte d'Ivoire; INERA, Burkina Faso; IER, Mali; ISRA, Senegal; INRAB, Benin; ITRA, Togo; Cotton companies involved are: SOFITEX, Burkina Faso; CMDT, Mali; INTERCOTON, Côte d'Ivoire; SODEFITEX, Senegal; AIC, Benin; NSCT, Togo; Farmers organizations are: UNPCB; Burkina; URECOS-CL; Côte d'Ivoire; UNSCPC, Mali; FNPC; Senegal; and CCNPCB, Benin.

- Cowpea is an important crop in the region, therefore in 2012 CORAF/WECARD mobilized regional and national partners to enhancing the productivity of cowpea for sustainable livelihoods in the region. The production and supply of improved cowpea seeds resistant to drought, the Striga (witch weed), and resistant to Maruka insect pests were promoted in Mali, Benin, Sierra Leone, Burkina Faso and Ghana.
- In partnership with Carnegie Institute of Science, and Manobi of Senegal, CORAF/WECARD launched a pilot project code named 'EarthAudit agricultural yield project'. This project is facilitating real-time dynamic predictions of future crop yields and crop variability in Senegal, Nigeria, Côte d'Ivoire and Burkina Faso. The project is creating a dynamic web-based platform that can evolve in real-time as the information and technologies evolve. Thus the essential data needed by countries for decision-making in climate change adaptation for more sustainable agricultural systems is being made available.
- To prevent conflicts between farmers and nomadic ruminant herders, CORAF/WECARD launched a project in 2011 aimed promoting sustainable intensification of integrated agriculture-livestock systems in the region. In 2012 the project mapped-out agro-pastoral spaces, and developed tools for faci-



Tackling the challenges of slash and burn

Regional research is promoting integrated and holistic approaches in sustainable use of natural resources, reductions in carbon footprints, land degradation and extreme poverty



Promoting research on inland fish farming for improved rural nutrition

ilitating dialogue between these users of commonly shared natural resources in the agro-pastoral system. Other benefits from the project include adaptation of innovations for improved management of degraded soils by farmers; and availability of improved nutritious livestock feeds. The partners include : Association pour la Promotion de l'Élevage au Sahel et en Savane (APESS), Burkina Faso. The partners are University of Maroua, Cameroon; ISRA, Senegal; Institut de Développement Rurale, Burkina Faso; IRAD, Cameroon; ILRI, Nairobi; University of Dschang, Cameroon; AGRHYMET, Niger; and ITRAD, Chad.

- To promote the return of groundnut produced in the region to international competitiveness, CORAF/WECARD in 2011 launched a regional project on reducing the aflatoxin content of groundnut produced in the region. In 2012 this project evaluated and characterized the level of aflatoxin contamination in groundnut. It also promoted improved pre- and post-harvest handling techniques which reduce aflatoxin contamination. The following partners are involved in the project implementation: Centre régional de recherche agronomique, Mali; Institut Sénégalais de Recherche Agronomique, Senegal; Institut de l'Environnement et de Recherches Agricoles, Burkina Faso; Crop Research Institute, Ghana; and ICRISAT Bamako.
- The CORAF/WECARD commissioned project aimed at an integrated management of ticks and tick-associated diseases in the region (WECATiC) continued its operations in 2012 in farmers' fields. Effective tick control strategies for sustainable production of cattle in West and Central Africa must be based on sound ecological data and assessments of the impact of tick control. In 2012 this project evaluated the potential impact of and the risks associated with Bm together with the increased virulence of

Result 1



XXXXXX

babesioses and anaplasmoses cattle diseases in West and Central Africa. Some of the outputs from this project will include recommendations of efficient mechanisms for the application of acaricides to cattle. An efficient application of acaricides could enhance cost-effectiveness of tick control; sustain the resistance to tick of local cattle stock; and reduce tick resistance to acaricides. Partners in this project include CSIRO of Australia; CIRDES (Burkina Faso), LNE (Burkina Faso), IDR/UPB (Burkina Faso), INERA (Burkina Faso), EPAC/UAC (Benin), IRAD (Cameroon), IRD (France).

- Because of the importance to rejuvenate aging cocoa stands in farms across the cocoa producing zones, the 2011 CORAF/WECARD commissioned regional project continued to promote access of farmers to genetically improved varieties of cocoa, and farming practices. The project facilitated sustainable intensification of smallholder cocoa farming systems in the region. In 2012 the project engaged the private sector in selecting and making available improved technologies and innovations cocoa farms in Ghana, Côte d'Ivoire, Cameroun and Togo.
- During the reporting year, CORAF/WECARD continued promotion of the uptake of improved integrated maize production systems in the region. CORAF/WECARD led a coalition of national, regional and international partners (ITRAD, IRAD, University of Maiduguri, IITA, Farmers, private sector and NGOs) that identified the best maize-leguminous crops rotation mixes for each soil types in project sites. Such rotation regimes are aimed at improved integrated Striga control and enhancing water use efficiency in farmers' fields in the project sites in Chad, Nigeria and Cameroon.
- A multi-national and multi-institutional partnership led by CORAF/WECARD proposed options for the sustainable promotion of the intensification of agro-pastoral production systems



Addressing productivity reducing diseases such as black Sigatoka in plantains

Pest and Diseases remain the most important yield-limiting factors for crop production in West & Central Africa



Cassava field with a mixture of healthy and infected plants

in West Africa. The project is developing intensification models on crop-livestock production in Niger, Mali, Senegal, Burkina Faso. Partners include International Livestock Research Institute (ILRI) based in Kenya, CIRAD (France), CSIRO (Australia), some NGOs and Farmers Organizations.

- The CORAF/WECARD multi-country project involving Burkina Faso, Senegal, Togo, and Congo aimed at reversing the negative effects of intensive peri-urban land cultivation in the West and Central Africa region focused attention on evaluating soil management options in 2012. The objective of this project was to reduce risks associated with intensive agricultural land use involving the heavy application of organic and inorganic fertilizers in peri-urban and urban agriculture, as well as assessing the biotic and abiotic contamination of the soil-plant systems resulting from intensification of agricultural land use.
- In 2012 CORAF/WECARD launched a project to promote research on traditional African vegetables (TAVs) in West and Central Africa. This project is based on the premise that increased productivity of African leafy vegetables is vital to the successful role vegetables could play in improved income of producers, and in the nutritional wellbeing of the people. This project is promoting the use of improved production systems coupled with the introduction of high quality seeds with high nutrient-dense cultivars; expanding knowledge in post-harvest and processing technologies and opportunities; and forging awareness of the nutritional benefits of TAVs. The partners in this new project include AVRDC (The World Vegetable Center); Helen Keller International, Burkina Faso; Institut de Recherche en Sciences Appliquée, Burkina Faso; University of Ghana; CSIR-Savana Agricultural Research Institute, Ghana; Institut de Recherches Agricoles pour

Result 1



A rural cattle market in the Sahel.

le Développement, Cameroon; and Center for Assistance to Sustainable Development, Cameroun.

- The CORAF/WECARD-led project on the role of women in the production and commercialization of non-staple crops in the cotton belt of West Africa provided evidence which support the significant role played by women in commercialization of non-staples. In 2012 the project quantified the productivity of rural women in the cotton, sesame and soybean value chains with a view to empowering the women for greater roles such as in the commercialization of processed cash-crop products in Burkina Faso, Benin and Togo. Partners in this project include INRAB, Benin; INERA, Burkina Faso; Program d'Appui à la Société Civil pour un Développement Intégré à la Base, Togo; and CIRAD, France.
- CORAF/WECARD mobilized INSAH/CILSS, ICRISAT, Millennium Development Center, some NGOs, National Meteorological and Hydrological Services; and universities and agricultural institutes and national research systems of Mali, Ghana and Senegal for implementation of a project to enhance farmers' resilience and adaptive capacity to changing and more variable climate in semi-arid West Africa. The project is up-scaling proven best-practices and site specific climate-resilient sustainable land, nutrient and water management practices and technologies.



Advocating policy for sustainable use of non-timber forest products

CORAF/WECARD's strategic decision-making options for policy, institutions and markets employ processes and tools to solve problems taking into consideration elements affected by the decision and the resulting outcomes

Strategic decision-making options for policy and markets developed

Highlights of Achievements

The CORAF/WECARD achievements with respect to achieving result 2 of its Operational Plan by 2012 are as follows:

- The CORAF/WECARD-led communication and advocacy tool on the promotion of safe biotechnology in West and Central Africa was made available to users in 2012. This tool included advocacy for bio-fortified sorghum in Burkina Faso. The tool was developed in partnership with CILSS.
- CORAF/WECARD launched a regional project advocating for policy support on the sustainable use of non-timber forest products (NTFP) in West and Central Africa, thus paving way for the strengthening of policies on the governance of NTFP. This project is based on the fact that NTFPs provide significant off-farm means of sustaining livelihoods in rural communities of the region, and therefore the need to ensure their sustainable use. The project is advocating rigorous implementation of strategic policies, legislations and rules which provide equitable and sustainable access to the actors in the NTFP value chain in Cameroon, Burkina Faso, Gabon, Democratic Republic of Congo and Senegal.
- The FARA-led SABIMA (Strengthening Capacity for Safe Biotechnology Management in Sub-Saharan Africa) project, coordinated regionally by CORAF/WECARD ended in 2012. The project proposed policy options and procedures which should contri-

Result 2

CORAF/WECARD encourages transparency in understanding of the most important risks



Non-timber forest products in a market in Central Africa

Contribute towards enhancing capabilities of NARS officials in providing leadership and stewardship for safe and effective use of agricultural biotechnology in Burkina Faso, Ghana and Nigeria.

- Understanding and improvement of the small ruminant value chain continued to be a focus of CORAF/WECARD in 2012. The project on small ruminants developed enhanced methods for small ruminants value chain analysis. The approach is aimed at facilitating the identification and tackling of the challenges of small ruminant production, and in improving the margins of productivity of smallholders.
- CORAF/WECARD is implementing a regional project which integrates enhanced value chains analyses of maize, soybean and cowpea, and essential staples in the region. The project is facilitating the identification of productivity intensification challenges of these crops in the region.
- Results from the recently concluded regional project on yam minisets indicated that the production and product handling capacity of smallholders and female traders of seed yams was significantly enhanced. Female traders were particularly involved in new SMEs marketing of seed yams in Ghana and Togo.

CORAF/WECARD's capacity strengthening activities were focused on organizational and institutional strengthening.



Mobilizing and coordinating partnerships for WAAPP implementation in 2012

The main focus of capacity strengthening is in non-conventional areas and is concerned with empowering stakeholders to identify and respond more effectively to their own needs

The West Africa Agricultural Productivity Program gains are achievable through increased use of improved agricultural technologies, innovative farm and agribusiness practices

Sub-regional agricultural research system strengthened and coordinated

Highlights of Achievements

The achievements with respect to achieving result 3 by 2012 are as follows.

- The eight regional projects designed as part of the CORAF/WECARD mechanism for the implementation of the ECOWAS plan of action for the implementation a safe and comprehensive biotechnology continued in 2012. An ex-ante study on GM products in West Africa which commenced in 2011 was concluded in 2012. A framework for regional cooperation mechanism for safe biotechnology implementation was finalized during the period. An effective mechanism was developed for networking experts with access to quality information and communication channels for advocacy, promotion of safe practices and agro-use of biotechnology.
- CORAF/WECARD CORAF/WECARD, with the support of UEMOA, launched a Biosafety initiative covering the eight (8) countries in the UEMOA zone. Methodologies, tools and procedures for evaluating and managing GM risks (environmental, sanitary, socio-economic) were established in the eight West African countries. This action paved the way for networking of participating institutions for effective evaluation, inspection and risk management of GM crops in the UEMAO zone. And for facilitating the implementation of the Cartagena Protocol in the zone, a prerequisite for the deployment of GM crops.

Result 3



Senegal, Mali and Ghana moved into phase II of WAAPP implementation

- CORAF/WECARD achieved a significant milestone in 2012 by successfully mobilizing, launching and coordinating the West African Agricultural Productivity Program (WAAPP) in all the countries in all the ECOWAS countries. The focus of WAAPP, which is CAADP-aligned, is transforming the region's agriculture through the development, dissemination and use of improved agricultural technologies in the 15 member countries of ECOWAS.
- The WAAPP is part of the World Bank's instrument for implementation of the Africa Action Plan (AAP) aimed at supporting regional integration and promoting technology use in sustainable food production. WAAPP is serving a useful purpose through integrating into the policy agenda of the participating countries, some innovative funding of agricultural research for development. It is also a key tool for the implementation of the African Union's Comprehensive Africa Agricultural Development Program (CAADP), led by the NEPAD Agency.



Cowpea farmers in Kano

Deployment of improved seeds supported by the dissemination of innovative agricultural practices is helping in changing the fortunes of farmers in the Kano-Katsina-Maradi (KKM) Pilot Learning Site (PLS) of the Sub-Saharan Challenge Program coordinated by CORAF/WECARD

Demand for agricultural knowledge from target clients facilitated and met

Highlights of Achievements

The highlights of CORAF/WECARD achievements of Result 4 in 2012 include.

- The 56 projects being coordinated by CORAF/WECARD created more innovation platforms (IPs) in several specific sites in parts of West and Central Africa. These Innovation Platforms, which CORAF/WECARD 'levers' aimed at encouraging and supporting innovations in agricultural development, are deepening the relationships between agricultural research scientists, research outputs and technology uptake systems (farmers, agro-processors, and markets - local, national and regional). These IPs enhance in the development of various crop and livestock research outputs which would be up scaled and out scaled. For example smallholder farmers are being linked to micro-financing institutions in the Kano-Katsina-Maradi (KKM) Pilot Learning Sites (PLS) of the Sub-Saharan African Challenge Program SSA-CP of Northern Nigeria and Southern Niger. This linkage is strengthening access to capital for rural farming households, enhancing the investment capacity of such households especially in the acquisition of farm inputs such as fertilizers, pesticides, and farm labor.
- A CORAF/WECARD Innovation Platform on post-harvest handling and processing involved ITA, Songhai and NARS partners from Nigeria, Togo, Ghana, Benin, Liberia, Mali, Senegal, Mali, Burkina Faso and Niger.

Result 4



Cross-section of users of technology at a regional workshop

CORAF/WECARD adopts the pluralism approach of the FAAP in the delivery of agricultural research, extension, and training services thus encouraging the involvement of diverse skills and strengths of a broad range of services to boost publicly supported agricultural productivity operations.

This IP is strengthening the capacity of small and medium entrepreneurs to uptake and adapt user-friendly techniques and equipment for post-harvest quality management and packaging of rice, sorghum, millet and cassava products. Bread-quality flour produced from this IP is already in the market.

- In an effort to reduce the problems of under nutrition in the region, CORAF/WECARD, in collaboration with national partners, created an Innovation Platform in Burkina Faso to promote and sensitize farmers on the socio-economic benefits of biofortified sorghum. Distribution of biofortified sorghum commenced in 2012. Biofortified sorghum can reduce inherent under nutrition in infants of most rural communities in the Sahel.
- CORAF/WECARD's regional project on the intensification of agro-pastoral systems established Innovation Platforms for information and knowledge exchange, including market information, between actors of the value chain in Mali, Senegal, and Burkina Faso. The project was also aimed at enhancing the capacity of research institutions to contribute to research information useful in simulating the productivity of crop-livestock production systems.
- The CORAF/WECARD project on promoting new innovations in IPM of cotton in West Africa produced instructional materials in 2012. These materials were designed to facilitate extension and advisory services to farmers on the use of improved IPM techniques in cotton fields in Benin, Burkina Faso, Côte d'Ivoire, Mali, Senegal and Togo.



Cross-section of participants at a regional technical workshop

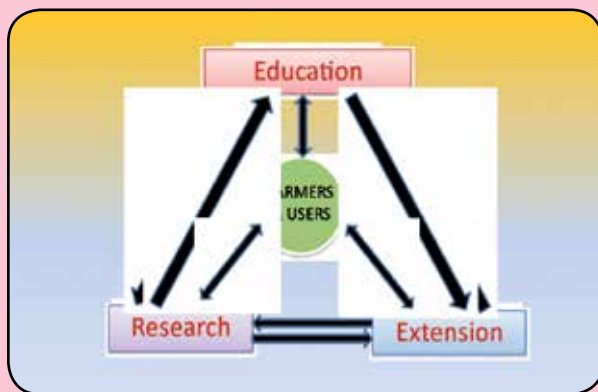
- During 2012, CORAF/WECARD in partnership with CTA completed a documentation of lessons learnt from agricultural research and technology use practices. This activity was aimed at promoting the dissemination of research outputs and in capitalization on good agricultural practices by the actors of the value chain in the region. This initiative was also aimed at promoting the use of web-based ICT tools, radio and CD Rom in efficiently accessing and diffusing information on available technologies and innovations to facilitate technology spillover effects within the region.
- Informing and communicating with all CORAF/WECARD stakeholders in agricultural research for development improved significantly in 2012. A total of 2650 requests for inclusion in the CORAF/WECARD regular mailing list were registered. In 2012 over 75,000 visits were made to the CORAF/WECARD website.
- Communication plans were developed and adapted to 10 WAAPP countries in 2012. These plans were aimed at facilitating communication by WAAP national coordinators.
- The CORAF/WECARD Secretariat developed four new web-portals in 2012 specifically for: DFID-funded projects; AusAID-funded projects; USAID-funded projects; and Promoting Science and Technology for Agricultural Development (PSTAD) project. Other tools which facilitate information and knowledge sharing that were developed in 2012 included databases aimed at increasing visibility of available technologies, and technologies being deployed from CORAF/WECARD projects. Similarly, a social media strategy and CORAF/WECARD results were disseminated through FACEBOOK, Twitter; and a page was created on Wikipedia in 2012.

Result 4



Innovation Platform for Technology Adoption

Promoting access to agricultural knowledge and information systems by smallholder farmers: using information and communication technology remains a major focus of CORAF/WECARD activities



Effective linkage agricultural knowledge and information systems with rural development

- In 2012 CORAF/WECARD published over 40 flyers, and brochures which describe its regional project outputs and outcomes and impact pathways (see list of publications). In addition to these, the monthly bulletin, CORAF ECHO published 12 issues in 2012. Furthermore, the quarterly web-based Coraf Action published four (4) issues. The 2011 Annual report and a documentary projecting the utility of WAAPP were published (see list of publications). During 2012, CORAF/WECARD, in collaboration with FARA, facilitated the acquisition and delivery of computer-based information and communication materials on agricultural research for Senegal and Mauritania NARS.





Enhancing Governance & Organization of Regional Agricultural Research for Development

Governance & Organization



*Dr. Harold Roy-Macauley
Confirmed as the new Executive Director
by the 10th CORAF/WECARD
GA in May 2012*



*Dr Paco Sereme
Immediate past Executive Director
(2003 and June, 2012)*

Enhancing Governance & Organization of Regional Agricultural Research for Development

A major challenge regularly addressed by CORAF/WECARD is to keep pace with the changing agricultural research environment, with continually evolving needs and requisite resources. To ensure that these evolving challenges are adequately managed, CORAF/WECARD organizes various statutory and non-statutory consultations some of which re-examines and fine-tunes the priorities around which regional programs and projects are conceptualized. In 2012 CORAF/WECARD organized the 3rd Agricultural Science Week (ASW), the 10th General Assembly (GA), two Governing Board meetings, and one meeting of the Scientific & Technical Committee. Several regional consultations were held with the goal of ensuring that regional agricultural research adapts to changes.

Highlights of the 2012 Agricultural Science Week (ASW)

The Third West and Central Africa Agricultural Science Week held May 14 to 17, 2013 at Ndjamena, Chad was declared open by His Excellency President Idriss Deby Itno, of Chad. It was the first time a sitting Head of State participated in the CORAF/WECARD-led Agricultural Science Week. CORAF/WECARD Stakeholders highlighted the need to increase investments in time and resources on the following themes.

- **Technology development and use:** Urgency for increased investments in the uptake of new technologies to tackle the resistance of crops to diseases,

Governance & Organization



Participants at the 3rd ASW visiting the shrinking Lake Chad

33 million people from four countries depend on Lake Chad for their livelihoods, thus making it imperative to restore and conserve this surface water



Sustaining watersheds in the region remains a natural resource management priority

insect pests, and enhance drought tolerance in a changing more variable climate. Based on the stability of plant physiological characteristics, experts participating in the 2012 Agricultural Science Week called for increased inclusion of physiological evidence in plant breeding and variety selection. It was recommended that CORAF/WECARD and its partners implement more programs and projects that promote mechanisms involving multi-stakeholder collaborative platforms in which policy-makers, producers, private sector and value chain actors developing win-win solutions as the region's agriculture strives to adapt to climate change. They stressed the need to ensure that regional projects with low carbon foot-prints be given priority attention.

- **Surface water loss:** Climate change induced loss of surface water reserves as observed in Lake Chad and major rivers of the West and Central Africa region was a major concern raised during the Week. The Lake Chad basin resources constitute the means of livelihoods of about 33 million people. It was recommended that policy makers be sensitized on strategic options and investments for combating change and variability.
- **Indigenous knowledge systems:** CORAF/WECARD and its partners were called upon to encourage systems that integrate farmers' indigenous knowledge practices in participatory action research to facilitate the development of community-specific innovations for adaption to the changing and more variable climate.
- **Livestock and fisheries:** The need to clearly integrate livestock issues in climate change adaptation programs and to increase the research intensity on crop-livestock integration, especially in relation to range livestock management was stressed.

Governance & Organization



Cross-section of participants at the 3rd ASW

Linking research, education and policy-making in climate science in the sub-region should adequately equip the sub-region for climate change adaptation

This was considered especially important as nomadic pastoralists are now covering wider areas following pasture loss, in their original rangelands due to climate change. These losses have caused increased conflicts between crop farmers and nomadic pastoralists. The need to initiate extensive ex-situ conservation of fisheries genetic resources was stressed because fisheries species loss was also a major concern arising from climate change-induced changes in the fisheries' natural spawning grounds in watersheds, rivers and lakes. The need for intensification of pisciculture and aquaculture systems was stressed to reduce dependence on marine resources, especially in coastal communities.

- **Publication of NARS research results:** To encourage the use of scientifically generated knowledge in agricultural development in the region the ASW plenary recommended that CORAF/WECARD establish and sustain an internationally acceptable mechanism which would continually encourage scientists in the national research systems to publish their research outcomes in the region. This should increase availability and accessibility of technologies to regional actors for development.
- **Multi-stakeholder partnerships:** The 2012 ASW also focused on the need for the strengthening of multi-stakeholder partnerships for affirmative action in combatting the effects of climate change in the region's agriculture. Such efforts should include active creation of awareness amongst the youths, educating the communities on the challenges of climate change and the imperative on the inclusion of gender dimensions in all requisite project activities.
- **Socio-political issues:** The Agricultural Science Week (ASW) stressed the need for CORAF/WECARD and National Systems to hype actions to promote socio-political dimensions in the adoption of inno-

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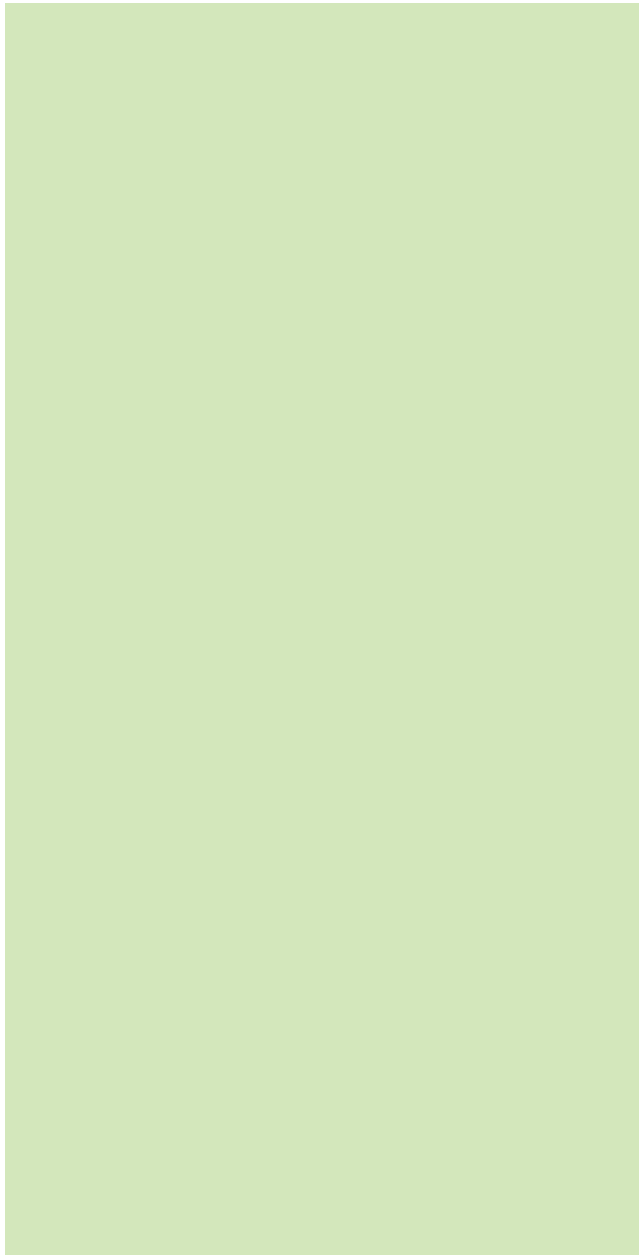


A side event at the 3rd ASW

vative technologies and strategies for adaptation to climate change. Actions include the development and deployment of computer models which could assist policy-making and in strategizing for adaptation to climate change for the benefit of the smallholder farmers in rural communities. It was particularly emphasized that the messages on advocacy for farm and crop insurances needed to be conveyed effectively to rural farm households. The ASW recommended that mechanisms which promote out-scaling of successes on farmers' innovation and participatory approaches be strengthened in order to increase buy-in by farmers and investors in the agricultural sector.

- **Multi-stakeholder partnerships:** The 2012 ASW also stressed the need for strengthening multi-stakeholder partnerships for affirmative action to tackle the effects of climate change in the regional agriculture. It endorsed the ongoing activities by CORAF/WECARD projects on climate change, and also called for increased awareness creation amongst the youths, and in educating communities on the challenges of climate change. The ASW also stressed the urgency for increased adoption of integrated production systems and that the governance of such integrated systems needed innovative management that should include actors of the value chain for each commodity and system.
- **Climate Science:** The plenary of the ASW emphasized the need to revise the agricultural curricula of universities in the sub-region to include climate science. ASW participants recognized the importance of linking research and education to policy-making in climate science for climate change adaptation. Deliberate actions should be taken to encourage the development of climate science in the sub-region with the goal of providing requisite qua-

Governance & Organization



lity data, facilitating data analyses and data sharing opportunities for policy and decision-making on climate change adaptation.



- **CORAF/WECARD 10th General Assembly**
- **Activities of the Scientific & Technical Committee of CORAF/WECARD**
- **Achievements of the CORAF/WECARD Executive Secretariat**

Highlights of the 10th CORAF/WECARD G A



*Participants at the CORAF/WECARD
10th General Assembly*

***The General Assembly is the sovereign
supreme policy-making organ of
CORAF/WECARD.***

Highlights of the 10th CORAF/ WECARD General Assembly

The 10th CORAF/WECARD General Assembly (GA) was held on 18 & 19 May, 2012, at Ndjamena, back to back with the Regional Agricultural Science Week. The 2012 General Assembly focused on the following issues.

- **Financial contributions of NARS to CORAF/WECARD:** The Assembly viewed with grave seriousness the high amount of unpaid arrears in annual financial contributions to CORAF/WECARD by most of the NARS. In this regard, the General Assembly recommended i) that all institutions represented in the Governing Board should be up to date with their contributions before June, 2013; ii) that all NARS and other constituent members of CORAF/WECARD redouble their efforts and ensure that all contributions were paid up before the next General Assembly in 2014.
- **Financial Reports of Competitive and of Commissioned Projects:** The 2012 GA deliberated on the high level of out-standing financial reports and supporting documentation expected from NARS coordinators of CORAF/WECARD projects. The Assembly called on coordinators of the 56 projects and NARIs' leaders to urgently take the necessary steps to deliver the reports. It also called for the Directors General of the NARIs and heads of all institutions involved in the implementation of CORAF/WECARD projects to be more involved in the monitoring of the projects' finances. These should facilitate a more timely transmission of financial reports to the CORAF/WECARD Executive Secretariat.

Highlights of the 10th CORAF/WECARD G A



Governing Board members; from left to right:

*Dr Noé Woin, Dr Samuel Bruce-Oliver,
Dr Harold Roy-Macauley, Mrs. Anne Simon,
Dr François Lompo, Mrs. Colette Irie Lou,
Mr. Bagna Djibo, Dr Alfred Dxon,
Dr Ibet Outhman Issa, Mrs. Gisèle d'Almeida Lopez,
Dr Macoumba Diouf, Mrs. Gifty Narh Guiella (invited
resource person), Dr Leini Lare, Dr Joel Beassem,
Dr Comlan Atsu Agbobli, Mrs. Marie Jose Niesten
(invited resource person).*



A 2012 Governing Board session in 2012.

- **Establishment of a Reserve Fund:** The General Assembly stressed the need for reserve fund for CORAF/WECARD. The fund should serve as a cushion during delays in the transfer of funds from financial partners to CORAF/WECARD for its projects' activities. The Assembly stressed that risks from fund transfer delays could impact negatively in the implementation of project activities. The financial partners participating in the Assembly indicated willingness to support such a Reserve Fund. The Assembly therefore recommended that CORAF/WECARD Executive Secretariat accelerate the establishment of such a fund.
- **Strengthening cooperation with University Networks:** The 2012 Assembly commended ongoing reforms in African Universities, and the various efforts of Networks of Universities and the initiatives for revitalizing the education system, particularly in science and technology in the sub-region. The Assembly therefore recommended that the NARS and the CORAF/WECARD Executive Secretariat strengthen their cooperation with the University Networks in West and Central Africa. The Assembly stressed continued strengthening of innovation platforms to assure capacity building of the NARS.

Resolutions of the 10th General Assembly

Resolution 1: Adoption of the report of the Chairman of the Governing Board and the activity report of the Executive Secretariat

The General Assembly;

Following the review in plenary of the administrative report of the Board Chair, and the Executive Secretariat;

Adopts

- i) The Report of the Chairman of the Governing Board and commends him for job well done;
- ii) Activity report of the Executive Secretariat for the period from June 2010 to April 2012; and
- iii) Financial statements for the 2010 and 2011 fiscal year as approved by the Governing Board during its sessions from June 2010 to December 2011.

Resolution 2 : Coordination of CORAF/WECARD competitive and commissioned projects

The General Assembly;

- In view of the large amount of unpaid arrears in annual contributions by a majority of the National Agricultural Research Systems; and
- In view of the increasing risks that these arrears of unpaid contributions could hinder the certification of CORAF/WECARD's accounts.

Invites

- i) The Governing Board and the Executive Secretariat to apply the 2008 Resolution with respect to the suspension of institutions whose NARS are not up to date with their annual dues from leading the implementation of CORAF/WECARD projects

Resolution 3: Recruitment of the new Executive Director

The General Assembly

Having familiarized itself with the transparent recruitment process of the new Executive Director

Approves

- i) the selection of Dr Harold Roy-Macauley as the new Executive Director of CORAF/WECARD,
- ii) That Dr Harold Roy-Macauley assumes this position on the 1st July, 2012.

Resolution 4: Recognition of immediate past members of the Governing Board

The General Assembly;

- Recognizing the significant contribution of the outgoing members of the Governing Board with respect to the smooth administration of CORAF/WECARD and the promotion of agricultural research and development in the sub-region; and
- Further recognizing their efforts in advocacy for strengthening cooperation between CORAF/WECARD and its partners

Congratulates

- i) The following outgoing members of the Governing Board :
 - o Prof Yusuf Abubakar, Outgoing Board Chair ;
 - o Dr Tiémoko YO;
 - o Dr Mbemba André-Makiza
 - o Dr Braham Huijsman
 - o Ms Simone ZOUNDI
 - o Ms Clarisse NEHOUDAMADJI

Resolutions of the 10th General Assembly

Resolution 5: Renewal of mandates of Members of the Governing Board

The General Assembly;

Following the satisfactory performance during their first mandates as Board members;

Renews

i) The term of office for two years of :

- o Dr Alfred Dixon, Director General of SLARI, Sierra-Leone,
- o Dr Comlan Atsu AGBOBLI, Director General of ITRA, Togo
- o Dr Ibet Outhman Issa, Director General of ITRAD, Chad
- o Mr Djibo Bagna, President of ROPPA,
- o Dr RUI Silva, Director of Agriculture, ECOWAS
- o Mr Roger TCHOUNGUI, Deputy Secretary General of CEEAC

Resolution 6: Election of new members of the Governing Board

The General Assembly;

- In view of Article 129 of the Statutes on the composition of the members of the Governing Board
- In view of Article 126 of the Statutes on the mandate and its renewal for members of the Governing Board

Elects

i) The following persons as members of the Governing Board for two years

- o Dr Lompo François, Director of INERA, Burkina Faso
- o Dr Macoumba DIOUF, Director General of ISRA, Senegal

- o Dr Noé WOIN, Director General of IRAD, Cameroun
- o Ms Gisèle d'Almeida, President of INTERFACE, Representing the Private Sector ,
- o Ms Irié Lou Colette, President of FENACOVICI, Representing NGOs
- o Dr Sam Bruce-Oliver de AfricaRice Center, Representing Scientific Partners.

Resolution 7: Election of Chairman and Vice Chairman

The General Assembly;

- In view of Article 14a of the Statutes on the election of the Chairman and Vice Chairman of the Governing Board:

Elects:

- o Dr Ibet Outhman Issa, Director General of ITRAD, Chad, Chair of the Governing Board;
- o Dr Alfred Dixon, Director General of SLARI, Sierra-Leone, Vice Chair of the Board

Resolution 8: Conclusions and Recommendations of the 3rd West and Central Africa Agricultural Science Week

The General Assembly;

- Considering the real threats that climate change and variability, constitute for food security in West and Central Africa;
 - Considering the constraints of the populations in adapting to climate change and variability; and
 - Considering the drying up of Lake Chad, thus endangering the livelihoods of millions of people in the region and the whole of Africa;
- i) **Commends** CORAF/WECARD for choosing the theme of climate change which is relevant to the sub-region

Resolutions of the 10th General Assembly

- ii) **Encourages** the NARS of countries in the region of the Lake Chad Basin and the ES of CORAF / WECARD, in collaboration with organizations charged with the management of Lake Chad Basin, to explore innovative solutions to arrest the drying-up of the Lake Chad; and
- iii) Endorses the Conclusions and Recommendations of the 3rd West and Central Africa Agricultural Science Week in this respect.

Resolution 9: Commendation to the National Agricultural Research System of Senegal

The General Assembly;

- Having noted with satisfaction the prize awarded to the National Agricultural Research Institute of Senegal by the Islamic Development Bank within the category of 'most distinguished research institution in the developing countries'
- i) **Congratulates** the Agricultural Research Institute of Senegal for its significant contribution to the advancement of agricultural science in Senegal and in Africa; and
- ii) Requests other institutes of NARS in the sub-region to render their major achievements more visible to actors and partners of the Agricultural Research for development sector.

Resolution 10: Expression of gratitude to the outgoing Executive Director

The General Assembly;

- Noting with satisfaction the significant results achieved by Dr Paco Sérémé as the Executive Director of CORAF / WECARD between June 2003 and June 2012;
- Noting with satisfaction the institutional reforms, the diversification of partnerships, and

impressive mobilization of resources for implementing the Strategic Plan;

- Further noting with satisfaction his leadership acumen which has led to increased credibility of CORAF / WECARD; and
- Satisfied with his efforts in the transformation of Agriculture in West and Central Africa;
- i) Expresses its gratitude to Dr Paco Sereme for the remarkable progress made during his mandate;
- ii) Names the conference hall at the CORAF / WECARD Headquarters in Dakar the 'Paco Sereme Hall.'

Resolution 11: Expression of Gratitude to the Chairman of the 10th General Assembly

The General Assembly;

- Considering the willingness of Prof. Idriss Oumar Alfaroukh to chair the 10th General Assembly of CORAF / WECARD; and
- Considering the smooth management of the deliberations;
- i) Expresses its gratitude to Prof Idriss Oumar Alfaroukh for his remarkable management of the Assembly and for his contributions to the deliberations.

Resolution 12: Expression of Gratitude to the Chairman of the 3rd West and Central Africa Agricultural Science Week

The General Assembly;

- Noting with satisfaction the smooth management of the sessions of the 3rd West and Central Africa Agricultural Science Week and his perfect mastering of the chosen theme;
- i) Expresses its gratitude to Dr Tabo Ramadjita for his significant contribution in chairing the

Resolutions of the 10th General Assembly

Week, ensuring the delivery of the expected results and the achievement of the objectives of the 3rd Agricultural Science Week.

Resolution 13: Country to host the next General Assembly

The General Assembly;

- Considering the candidature of Niger to host the 4th West and Central Africa Agricultural Science

Week and the 11th General Assembly of CO-RAF/WECARD

- i) **Approves** the choice of Niger to host the 4th West and Central Africa Agricultural Science Week and the 11th General Assembly of CORAF/WECARD.

N'Djamena, 19 May 2012
The General Assembly

Highlights of Activities of the STC



Scientific & Technical Committee members from left to right: *Dr NJI Ajaga; Dr. Eva Weltzien; Dr. Bamidele Omitoyin; Dr. Brigitte Courtois ; Prof Claude Adandedjan; Prof Muhammadou Kah; Dr. Abdoulaye Mando; Dr Mamadou Sangare; Prof Eric Tollens; Dr. Alassa Mouliom*

The CORAF/WECARD Scientific and Technical Committee is the technical arm of the Governing Board, providing technical counsel on the quality and relevance of regional projects.



The STC in a working session in 2012.

Highlights of activities of the Scientific and Technical Committee (STC) of CORAF/WECARD in 2012 included.

- The 2012 statutory meeting of the Scientific & Technical Committee (STC) validated its action plan for the next two years. The Committee also worked with the CORAF/WECARD Directorate of Programs to improve the quality of outputs from ongoing projects; and in finalizing the Directorate of Programs annual work-plan for 2013. Traditionally, the STC presents the Programs annual work-plan to the Board of CORAF/WECARD in November of every year. The STC statutory meeting of 2012 focused on enhancing the quality of scientific outputs from regional projects. In this respect, the Committee stressed the following: (a) the need for the CORAF/WECARD Secretariat to speed-up the disbursement of funds to regional projects; (b) the need to increase staff strength of the CORAF/WECARD Secretariat commensurate to increasing volume of work; (c) adequately addressing the issues of integrated agricultural research for development (IAR4D), ICT and Knowledge Management, and cross-cutting issues such as agriculture-nutrition-health-income nexus; (d) improving scientific and technical publications and procedures for selection of projects for funding.
- The 2012 STC selected and proposed 10 impact-oriented regional projects to the CORAF/WECARD Governing Board for consideration and approval for funding.
- Furthermore, the STC reviewed, endorsed and recommended to the Board the roadmap for developing the proposed new Operational Plan 2014 – 2018 for CORAF/WECARD

Achievements of the CW Executive Secretariat



Executive Secretariat staff in 2012



Programs planning session at the ES in 2012.



CORAF/WECARD Executive Secretariat staff during a retreat in 2012

The Executive Secretariat was actively engaged in several governance issues which included: the central coordination of the day-to-day management of CORAF/WECARD; ensuring that statutory meetings of CORAF/WECARD – General Assembly, the Governing Board, and the Scientific & Technical Committee were scheduled and held.

Highlights of the 2012 achievements include:

- A revised version of the CORAF/WECARD host country agreement with the Government of Senegal was approved by the Foreign Affairs Ministry of Senegal. The revised agreement scheduled for the joint signature of the Government of Senegal and CORAF/WECARD.
- The Executive Secretariat launched a Fellowship Program aimed at hosting NARS scientists at the Secretariat for periods of three to four weeks. This program was aimed at creating and sustaining national champions and advocates for CORAF/WECARD. During the period of the NARS scientist fellowship at the Secretariat, the Fellows were familiarized with regional programs, projects and strategic approaches of CORAF/WECARD with a view to integrating relevant elements into national activities on their return home.
- The West Africa Agricultural Productivity Program (WAAPP) was expanded in 2012 bringing to 15 the number of countries implementing the Program. This required enhancement of management of the Program. A professional staff was therefore recruited for that purpose. Furthermore, following the need to mainstream gender in all research for activities conducted by CORAF/WECARD, the recruited a gender specialist in 2012.

Achievements of the CW Executive Secretariat

- In 2012 the CORAF/WECARD Secretariat staff strength was thirty-five (35) core staff members and eleven (11) staff members recruited under specific projects. Twelve (12), corresponding to 26% of the total staff members were female.
- The Executive Secretariat team was supported in 2012 by two (2) consultants and four (4) interns.





Strengthening Partnerships for Regional Agricultural Research for Development

Strengthening Partnerships



CORAF/WECARD brokered partnerships between national research systems and international development partners in the implementation of WAAPP in 2012



A WAAPP partnership meeting in Côte d'Ivoire in 2012.

- CORAF/WECARD negotiated and coordinated the second phase of the West Africa Agricultural Productivity Program (WAAPP) for the three pilot countries - Ghana, Mali and Senegal (WAAPP 2A), resulting in a final Project Appraisal Document, which was successfully presented and approved by the Board of the International Development Aid (IDA) of the World Bank on the 25th May, 2012.
- CORAF/WECARD mobilized and launched national and regional WAAPPs in WAAPP 1B countries (Burkina Faso, Côte d'Ivoire and Nigeria) and 1C countries (Benin, The Gambia, Guinea, Liberia, Niger, Sierra Leone, and Togo).
- In 2012 CORAF/WECARD initiated, with the World Bank, the process of launching the Central Africa Agricultural Productivity Program (CAAPP) for the pilot countries: Chad, Cameroon and Congo.
- Partnership with the African Forum for Agricultural Advisory Services (AFAAS) was established with the aim of supporting the establishment of the West and Central Africa sub-regional branch and facilitating the development of plans for integrating Extension and Agricultural Advisory Services in CORAF/WECARD's activities. The objective of this activity was to achieve more effective dissemination of technologies and innovations.
- CORAF/WECARD collaborated with FARA in the delivery of the following outputs: (i) guidelines for the development of a tool for strengthening the support of CGIAR Centers research to National Agricultural Investment Plans (NAIPS) and the Regional Agricultural Investment Plans (RAIP); (ii) guidelines for the development of a sensitization program for countries on CAADP and the FAAP principles; (iii) guidelines for the development of an African Science Agenda to facilitate the imple-

Strengthening Partnerships



Programs planning session at the ES in 2012.



CORAF/WECARD Executive Secretariat staff during a retreat in 2012

mentation of CAADP; (iv) identified priority areas for collaboration with ACIAR of Australia in the establishment of an African Food Security Centre; and (v) proposed recommendations for including a wider range of regional technical partners in the definition of the roles of FARA, and the subsidiarity principle. In 2012, CORAF/WECARD also collaborated with FARA in the implementation of Africainteract project. This included the review and endorsement of the project's delivery strategy; and approbation of the actions for the year.

- Following AusAID's decision to contribute towards CAADP's implementation, collaboration with CORAF/WECARD was developed. Furthermore, CORAF/WECARD, CIRAD and CSIRO/AusAID embarked on a tri-partite partnership on a program to strengthen pathways to food security in West Africa through a participatory and collaborative scientific process. CORAF/WECARD and CILSS were chosen in 2012 to assist in providing the focus for engagement on this domain in the region.
- In 2012, CORAF/WECARD entered into a more formal agreement with ROPPA [Réseau des Organisations Paysannes et de Producteurs de l'Afrique de l'Ouest], the leading Farmers' Organization in West Africa. This agreement would promote greater involvement of technology uptake systems in sustainable agricultural research for development; and enhancing relationships between research and farmer organizations.
- CORAF/WECARD's relationship with ECOWAS was strengthened during the period. In its status as ECOWAS's technical arm for the implementation of regional agricultural research in West Africa since 2005, CORAF/WECARD continued to pro-actively lead and participate in ECOWAS initiatives. In the regional research policy program CORAF/WECARD contributed to the delivery of the

Strengthening Partnerships



CORAF/WECARD brokered partnerships between national research systems and international development partners in the implementation of WAAPP in 2012



A WAAPP partnership meeting in Côte d'Ivoire in 2012.

following outputs in 2012: (i) review and revision of the synthesis report of the national research policies of ECOWAS member countries; (ii) amendment of the draft regional agricultural research policy document; and (iii) review of the framework document on research networks in ECOWAS zone. These inputs are expected to lend weight to the ECOWAS member states support to agricultural research for growth and development, especially through implementation of the WAAPP

- CORAF/WECARD was proactively involved in the FARA-led process of developing an agricultural science agenda for Africa in 2012. The process included the Dublin momentum meetings on the alignment of the CG research programs to CAADP and NAIP to enhance the delivery of more robust technological outputs for the national systems implementing CAADP.
- Participation in regional and international dialogues, colloquiums and conferences provided CORAF/WECARD opportunities to continue its advocacy roles for agricultural research for development. These forums served as appropriate platforms for presentation of the outputs from CORAF/WECARD's programs, and its position on agricultural transformation in the region.
- In 2012 CORAF/WECARD participated in several of these international meetings. These include: a) Regional dialogue organized by the UEMOA and ECOWAS commissions in June, 2012, in Cotonou, Benin to define measures at the national, regional and international levels for managing the food and nutritional crises in the region. The meeting resolved to establish supplementary and coordinated structural contingency measures in the medium to long-term to appropriately address the recurrent food crisis in West Africa and in the Sahel; b) The 2012 Global Conference for Agricultural Research for Development (GCARD II), in Punta del Este, Uruguay, from 27

Strengthening Partnerships



October to 1 November, 2012 had a strong representation from CORAF/WECARD. The presentation made by the Executive Director, Dr. Harold Roy-Macauley, on international collaboration on agricultural research for development, was widely acclaimed and discussed during the Conference; c) CORAF/WECARD advocated for increased application of cutting-edge science to the region's agriculture during a conference of the Convergence of Science - Strengthening Agricultural Innovation Systems (COS-SIS) Programme in Ghana, in October, 2012. Partners of COS-SIS include the University of Wageningen, the Royal Tropical Institute for Development Policy & Practice (KIT) and CDI all from the Netherlands and universities and research and development institutes from Benin, Mali and Ghana.

- To improve the involvement of NARS from Central Africa zone in regional activities, CORAF/WECARD engaged the Congo Basin Forest Partnership (CBFP), COMIFAC and ECCAS in September 2012. Consultations held with these institutions focused on a more comprehensive and proactive involvement of the NARS from Central Africa zone including the need to launch the Central Africa Agricultural Productivity Program (CAAPP), similar to WAAPP in West Africa.
- CORAF/WECARD participated in the third meeting of Tertiary Education in Agriculture Mechanism (TEAM-Africa) in November, 2012, in South Africa. TEAM-Africa was established to facilitate the integration of technical agricultural education into the CAADP processes and plans of action. TEAM-Africa also aims at catalyzing changes in Tertiary Agriculture Education (TAE) institutions to produce graduates able to identify, analyze, and resolve real-world problems, and to mobilize and harmonize investments to achieve the critical mass needed to meet these needs.



CORAF/WECARD Challenges in 2012

Strategic Stakeholders Consultations by CORAF/WECARD in 2012

CORAF/WECARD Challenges in 2012

CORAF/WECARD has been striving to ensure that all work conducted is coherent with the 2008-2012 Operational Plan. By identifying prioritized programs which are all contributing to the delivery of CORAF/WECARD's strategic Results, it is clear how new and current initiatives are addressing the delivery and objectives of the sub-region, and of CAADP pillar IV

CORAF/WECARD Challenges in 2012

CORAF/WECARD managed the following challenges as the Operational Plan was being implemented during 2012.

- Addressing the financial requirements of the competitive grant projects under Multi-Donor Trust Fund (MDTF). This resulted in delays in implementation of the regional projects funded under the MDTF. Following several consultations on the need to revise upwards the ceiling of authorized funds, the World Bank, which manages the MDTF, made more funds available for the projects implementation.
- CORAF/WECARD Executive Secretariat experienced significant delays in receiving technical and financial reports from regional project coordinators, resulting in late reporting to CORAF/WECARD donors. A mechanism for motivating project coordinators as well as participating staff on projects had to be devised to ensure a more timely delivery of technical and financial reports to CORAF/WECARD.
- Delays in procurement processes remained a concern and these accounted for delays in implementation of several planned activities.
- The increasing workload of the CORAF/WECARD Executive Secretariat-based Program Managers affected program management. Additional Program Assistants were hired to provide needed support.

Consultations



ES Staff in a regional strategic consultation with NARS in 2012

Strategic partnerships is core to the operations of CORAF/WECARD



A strategic partner speaks at a 2012 CORAF/WECARD meeting

Strategic Stakeholders Consultations facilitated by CORAF/WECARD in 2012

CORAF/WECARD proactively led the following strategic stakeholders' consultations in 2012.

- Regional consultations on the modalities for implementation of the ECOWAS regional regulatory framework on seeds, September 24 to 26, 2012;
- Strategic support to CARBAP in its design and implementation of a robust planning, monitoring and evaluation system, January 16 to 21, 2012.
- Strengthening collaboration between research programs of CGIAR and CAADP within the NAIP (National Agricultural Invest Plans) September 4 to 6, 2012.
- Regional launch of WAAPP 1B and 1C April 24 to 26, 2012. The following countries launched their WAAPP: Togo, Burkina Faso, Sierra Leone and Côte d'Ivoire.
- Establishment of collaboration between IFPRI and CORAF/WECARD to support implementation of the Strategic and Operational Plans, strengthen M&E systems and conduct impact assessments to assess the return on investment in the WAAPP program, December 14, 2012
- Consultations between UNECA and AfricaRice March 15 to 16, 2012.
- Strategic consultations between CSIRO-CIRAD-CORAF/WECARD in the domain of food security in Africa September 19 to 21, 2012.



- **Financial Outlook 2012**
- **Conclusion**
- **CORAF/WECARD Management Organs**
- **CORAF/WECARD Personnel**
- **CORAF/WECARD Publications 2012**
- **Acronyms and Abbreviations**

Financial Outlook for 2012

1. Balance sheets for the years ended 31 December 2012 and 2011 (000 FCFA) **

Assets	2012	2011
Intangible assets	15 642	29 050
Fixed assets	245 546	243 921
Financial Assets	2 652	23 844
Receivable and similar assets	2 290 538	1 728 536
Cash Assets	4 441 518	1 700 347
Total assets	6 995 896	3 725 698
Liabilities and net assets		
Capital grant	252 565	399 280
Financial liabilities	419 317	387 437
Current liabilities	6 319 526	2 938 981
Cash liabilities	4 488	—
Total liabilities and net assets	6 995 896	3 725 698

Financial Outlook for 2012

2. Statements of revenue and expenses, 2012 and 2011 (000 FCFA)

Revenue	2012	2011
Donor grants	5 601 565	4 135 738
Restricted grants	4 269 212	2 398 742
Unrestricted grants	1 332 353	1 736 996
Other grants	416 665	172 091
Interest and miscellaneous	—	—
Total revenue	6 018 230	4 307 829
Expenses		
Program related expenses	4 751 824	3 186 094
Management/governance	1 401 146	1 062 128
Total expenses	6 152 970	4 248 222
(Deficit) surplus	-134 740	59 607

***Figures presented are a synthesis of financial information.
Detailed statements are available from CORAF/WECARD on request.*

Financial Outlook for 2012

3. Financers of CORAF/WECARD in 2012 and 2011 (000 FCFA)

Financers		
NARS	2012	2011
Benin	1 000	1 000
Burkina Faso	1 000	1 000
Cameroon	1 000	1 000
Cape Verde	1 000	1 000
Central African Republic	1 000	1 000
Chad,	1 000	1 000
Congo	1 000	1 000
Côte d'Ivoire	1 000	1 000
Democratic Republic of Congo	1 000	1 000
Gabon	1 000	1 000
Gambia	1 000	1 000
Ghana	1 000	1 000
Guinea	1 000	1 000
Guinea Bissau	1 000	1 000
Liberia	1 000	1 000
Mali	1 000	1 000
Mauritania	1 000	1 000
Niger	1 000	1 000
Nigeria	1 000	1 000
Senegal	1 000	1 000
Sierra Leone	1 000	1 000
Togo	1 000	1 000
WAAPP West Africa NARS	617 934	406 778
TOTAL	639 934	428 778

Financial Outlook for 2012

Financers	2012	2011
RECs		
ECOWAS	89 631	62 239
Total RECs	89 631	62 239
Technical Partners		
CTA	1 438	7 475
FARA	388 298	583 276
ICRISAT	24 438	30 507
CIRAD	21 269	52
Total Technical Partners	435 443	621 310
Development Partners		
DFID	1 332 353	1 736 996
USAID	840 941	420 279
AusAID	1 410 132	479 501
IDRC/CRDI	191 276	173 925
WORLD BANK MDTF (EU & CIDA participation)	683 855	234 710
Total Technical Partners	3 126 204	1 308 415

4. Total costs of all ongoing projects** (000 FCFA)

Financers	2012	2011
Projects		
Competitive projects	2 616 222	2 682 064
Commissioned projects	3 295 999	937 140
Special tasks (if any)		
Total projects	5 912 221	2 619 204

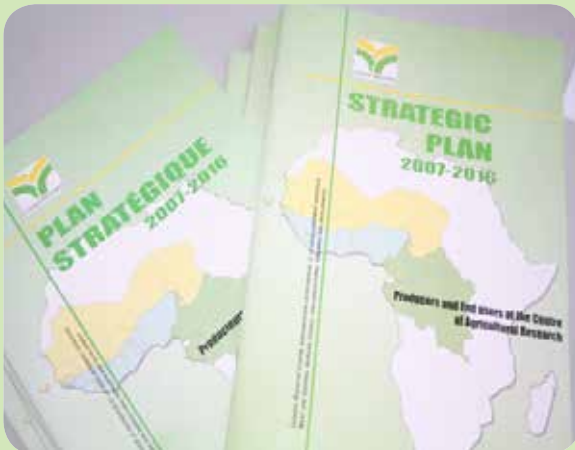
***Some ongoing projects still being implemented by December 31, 2012 started way before 2012.
Costs of projects increased over time as implementation of the Operational Plan progressed.*

Conclusion



- During the 2012 reporting period, implementation of the Operational Plan (2008-2013) was marked by the smooth change of leadership of CORAF/WE-CARD as well as significant strides made in advocacy, technical and scientific partnerships strengthening, and strategic alliances with new stakeholders in agricultural research for development.
- Financial Management was adjudged by partners as highly satisfactory with low levels of risks.
- In 2012 the Programs Directorate successfully launched several new projects in addition to the thirty eight on-going regional projects coordinated by CORAF/WECARD.
- An extension of the Institutional Support of USAID-WA through the new Initiative of the US Government on Feed the Future (FtF) was negotiated
- Expansion of WAAPP to all countries in West Africa remained a significant milestone.
- Nutrition is currently being integrated into regional research projects coordinated by CORAF/WECARD.
- CORAF/WECARD is currently exploring collaboration with EMBRAPA within the framework of marketing agricultural innovations, striving to enhance partnerships with stakeholders of agriculture in Brazil and other Latin American countries.
- In the light of these initiatives, CORAF/WECARD has increasingly continued to play its strategic role in agricultural research for development in the West and Central Africa region.

Publications in 2012



Aperçu de l'Initiative AFRICA INTERACT - Note d'Information. CORAF/WECARD. 4 pages

Aperçu du Partenariat CORAF/WECARD-AUSAID-CSIRO sur la sécurité alimentaire en Afrique de l'Ouest et du Centre-Note d'Information. Document de travail. CORAF/WECARD

Development of effective synergy between sub-regional stakeholders : Strategic Option Paper of CORAF/WECARD. Working Paper: CORAF/WECARD

Development of Greater Mobility for Value-Chain stakeholders-Strategic Option Paper of CORAF/WECARD- Working Paper : CORAF/WECARD, 16 pages

Development of more effective Technology Transfer between sub-regional stakeholders-Strategic Option Paper of CORAF/WECARD-Working Paper CORAF/WECARD, 16 pages

Development of National Centers of Specialization under WAAPP- Strategic Option Paper of CORAF/WECARD- Working Paper : CORAF/WECARD, 16 pages

Développement d'un transfert plus effectif entre les acteurs de la sous-région - Document sur les Options stratégiques du CORAF/WECARD. Document de travail CORAF/WECARD

Développement d'une plus grande mobilité pour les acteurs de la chaîne de valeur - Document sur les Options stratégiques du CORAF/WECARD - Document de travail CORAF/WECARD, 16 pages

Développement d'une synergie effective entre les Acteurs de la sous-région : Document sur les Options stratégiques du CORAF/WECARD - Document de travail CORAF/WECARD, 16 pages

Publications in 2012

Développement des Centres Nationaux de spécialisation dans le cadre du PPAAO – Document sur les Options stratégiques du CORAF/WECARD - Document de travail publié par le CORAF/WECARD, 16 pages

Editors Paco Sereme & Harold Roy-Macauley. (Editors) 2012 Empowering the Rural Poor to Adapt to Climate Change and Variability in West and Central Africa: - 1 Proceedings of CORAF/WECARD 3rd Agricultural Science Week, Ndjamen, Chad, 14 -17 May, 2012; CORAF/WECARD. 193 pages;

Paco Sereme & Harold Roy-Macauley. (Editors) 2012. **Empowering the rural poor to adapt to climate change and variability in West and Central Africa:** 2 Proceedings of CORAF/WECARD 10th General Assembly, Ndjamen, Chad, 18 -19 May, 2012, CORAF/WECARD. 64 pages

Etat des lieux sur l'Agribusiness et les systèmes mixtes agriculture-élevage en Afrique de l'Ouest et du Centre-Rapport d'étude - CORAF/WECARD, 96 pages

Evaluation des capacités des laboratoires nationaux et régionaux d'Afrique de l'Ouest qui pourraient servir de Centres d'excellence de la CEDEAO et du CORAF/WECARD en biotechnologie et biosécurité-Rapport d'étude - CORAF/WECARD, 105 pages

Faits marquants de la 1ère semaine scientifique et 8ème Assemblée générale et 2ème Semaine scientifique et 9ème Assemblée générale du CORAF/WECARD. CORAF/WECARD, 136 pages.

Highlights of the 1st Agriculture Science Week and 8th General Assembly of CORAF/WECARD; and the 2nd Agriculture Science Week and 9th General Assembly of CORAF/WECARD. CORAF/WECARD, 136 pages

Integrated Agricultural Research for Development (IAR4D) -InnovationSystems:InnovationPlatforms(IP)ofAgriculture

Value Chains and Food Systems-Information note - Working Paper CORAF/WECARD, 24 pages

Jalloh, A, Roy-Macauley, H, Sereme P, Major agro-ecosystems of West and Central Africa: Brief description, species richness, management, environmental limitations, and concerns. Agriculture, Ecosystems & Environment, vol. 157 (August 2012) pp 5-16.

Jalloh, A, Roy-Macauley, H, Kuisseu, J 2011; **Climate change research and development orientation framework: A CORAF/WECARD strategy for guiding climate change research and development in West and Central Africa.** CORAF/WECARD, Dakar, Senegal CORAF/WECARD Climate Change Strategy

Jalloh, A., Rhodes, E.R., Kollo, I, Roy-Macauley, H., and Sereme P. 2012 **Nature and management of the soils in West and Central Africa: A review to inform farming systems research and development in the region.** CORAF/WECARD, 64 pages

Jalloh, A., Sarr, B., Kuisseu, J., Roy-Macauley, H., and Sereme P. 2011. **Review of climate in West and Central Africa to inform farming systems research and development in the sub-humid and semi-arid agroecologies of the region.** CORAF/WECARD, 56 pages.

Overview of the Partnership CORAF/WECARD-AUSIAD-CSIRO : Food Security in West and Central Africa – information Note - Working Paper: CORAF/WECARD, 4 pages
Overview on AFRICA INTERACT Initiative – Information Note. Working Paper CORAF/WECARD, 4 pages

Rapport annuel 2011 – Consolider les opérations de recherche et de développement agricoles pour une agriculture durable en Afrique de l'Ouest et du Centre : CORAF/WECARD, 64 pages

Publications in 2012

Rapport de l'étude de référence sur l'élevage, la pêche et l'aquaculture en Afrique de l'Ouest et du Centre-Rapport général, document de travail : CORAF/WECARD, 96 pages

Rapport de l'étude de référence sur les cultures non-vivrières en Afrique de l'Ouest et du Centre-Rapport général-Document de travail : CORAF/WECARD, 106 pages

Rapport général atelier de formation sur les méthodes d'analyses des impacts des politiques agricoles en Afrique de l'Ouest et du Centre - rapport d'atelier - document de travail : CORAF/WECARD, 16 pages



List of Flyers published in 2012

1. Unlocking the Potentials of Improved Seeds for Food Security in West & Central Africa
2. AfricalInteract: Enabling Research-to-Policy Linkage for Adaptation to Climate Change
3. Optimizing Productivity and Diversity of Agroforestry Cocoa Systems
4. Adopting Bt-Cowpea Varieties for Enhanced Crop Productivity in Burkina Faso, Mali and Togo
5. Improving Productivity & Competitiveness of the Milk Sub-sector in West and Central Africa
6. Integrated Aquaculture based on Rice and Poultry Production
7. Building Resilience into Mixed Milk-Vegetable Production System of Semi-Arid Zones of West Africa
8. Enhancing Cowpea Productivity for Sustainable Livelihoods of Farmers in West Africa
9. Improving Postharvest Processing of Rice, Millet, Sorghum and Cassava in West Africa
10. Promoting Integrated Maize Management Technologies for Enhanced Productivity
11. Promotion of Maize and Cowpea Postharvest Technologies in West and Central Africa
12. Policy Advocacy for Sustainable Use of Non-Timber Forest Products in West & Central Africa
13. Promoting Technologies for Integrated Management Plantain
14. Promotion of Striga Resistant Varieties of Sorghum in the Sahel of West Africa
15. Sustainable Intensification of Integrated Crop Ruminant Production Systems in West Africa

List of Flyers published in 2012

16. West Africa Seed Program
17. Promotion of Seed Yam Production Using Yam Miniset Technology
18. Options for a Sustainable Intensification of Agro-Pastoral Production Systems in West Africa
19. Empowering Rural Communities through Integrated Aquaculture with Rice and Piggery
20. Deploying in-vitro Tissue Culture Techniques in Multiplication of ACMV-free Cassava Cuttings
21. Reversing the Negative Effects of Intensive Peri-urban Land Cultivation in West and Central Africa
22. Intensifying Smallholder Fish Farming Systems in West And Central Africa
23. Integrated Management of Ticks and Tick-Associated Diseases in West & Central Africa (WECATIC)
24. Promoting Africa Biofortified Sorghum (ABS) in West Africa
25. Dissemination of Research Outputs and Good Agricultural Practices in West and Central Africa
26. Enhancing the Application of Safe Agricultural Biotechnology in the ECOWAS Region
27. Enhancing and Sustaining Cotton Productivity in West and Central Africa
28. Evaluating and Deploying Varieties of Rice with Yellow Mottle Virus Resistant Gene in West Africa
29. Strengthening Capacity for Safe Biotechnology Management in Sub-Sahara Africa (SABIMA)
30. Strategic Mechanism for Evaluating & Managing Risks Associated with Introduction of GMO
31. Sustainable Intensification of Integrated Agriculture-Livestock Systems for Enhanced Productivity
32. Promoting Integrated Cereal-Livestock-Tree Systems for Sustainable Land Use in the Sahel
33. Dissemination of New Agricultural Technologies in Africa (DONATA)
34. EarthAudit Agricultural Yield Pilot Project
35. Promoting Strategies for Sustainable Management of Trypanotolerant Cattle Breed in West Africa
36. Strengthening Capacity for Agricultural Research and Development in Africa –Strengthening Capacity For Agricultural Innovations (SCARDA-SCAIN)
37. Sub-Saharan Africa Challenge Program Implementation in Kano/Katsina/Maradi Pilot Learning Site
38. West Africa Agricultural Productivity Program (WAAPP)

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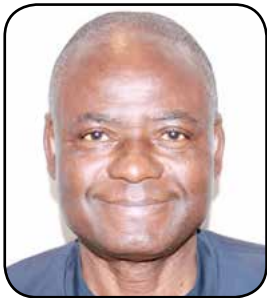
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Dr Paco SEREME* : Immediate past Executive Director

Ms Awa Cissé DIONE : Controller of Finance

Ms Arame Diattara NDIAYE : Personal Assistant to Executive Director

Programs Department

Dr Aboubakar NJOYA : Director of Programs

Dr (Ms) Mbène Dièye FAYE : Manager, Policy & Markets Program

Prof. Abdourahmane SANGARE : Manager, Biotechnology & Biosafety Program

Dr Ernest Assah ASIEDU : Manager, Staple Crops Program

Dr Hamadé KAGONE : Manager, Livestock Fisheries & Aquaculture Program

Dr Abdulai JALLOH : Manager, Natural Resources Management Program

Dr Sidi SANYANG : Manager, Capacity Strengthening Program; & Manager, Knowledge Management Program

Dr Ousmane NDOYE : Manager, Non-Staple Crops Program

Dr Vincent Joseph MAMA : Head of Monitoring & Evaluation

Dr Georges Achu MULUH : Head of Planning

Dr Mariame MAIGA : Gender Specialist

Dr Abdourahmane ISSOUFOU KOLLO : Officer-in-charge, AusAID-CORAF Partnership

Dr Niéyidouba LAMIEN : Officer-in-charge, WAAPP

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Mr Mika NDONGO : Program Assistant

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Mr Cheikh Tidiane GUEYE : Accountant

Ms Monique NGOM : Accountant

Mr Justin Nama KOUAME : Accountant

Ms Marianne SECK : Assitant Accountant

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Ms Sophie Yandé NGNING : Human Resources Assistant

Ms Matilde SEMEDO : Personal Assistant

Ms Aline VALIAN : Procurement Assistant

Ms Nina Téning FAYE : Receptionist

Mr Mamadou TANDJIGORA : Driver

Mr Issa GUEYE : Driver

Mr Joseph COLY : Assistant in Multi-purpose tasks

Mr Marc Ramiro GOMIS : Security services

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Mr Gorgui Alioune MBOW : Assistant Information and Communication Technology

Mr Alassane DIA : Graphics Designer

Ms. Ndèye Oulèye ANNE : Assistant in Data Bases

Ms. Ndèye Khady Lô BA : Assistant in Scientific Communications

Resident Consultants

Mr Moussa DILOMBI : Consultant in Finance

Mr Armand FAYE : Consultant in Scientific Communication

Resident Consultants

Mr Patrice LEUMENI : Monitoring & Evaluation

Mr Luc Hervé ZOK : Human Resources

Mr Idrissa BOURGOU : Data Bases

Mr Philippe ROMERO : Communication

Interns

Mr Patrice LEUMENI : Monitoring & Evaluation

Mr Luc Hervé ZOK : Human Resources

Mr Idrissa BOURGOU : Data Bases

Mr Philippe ROMERO : Communication

Acronyms & Abbreviations

AATF African Agriculture Technology Foundation

ACIAR Australian Centre for International Agricultural Research

ACMV African Cassava Mosaic Virus

AFAAS African Forum for Agricultural Advisory Services

AFSTA African Seed Trade Association

AGRA Alliance for a Green Revolution in Africa

APDRA Association Pisciculture et Développement Rural en Afrique tropicale humide – France

APESS Association pour la Promotion de l'Élevage au Sahel en Savane

ASARECA Association for Strengthening Agricultural Research in Eastern and Central Africa

ASW Agricultural Science Week

AU African Union

AUC African Union Commission

AusAID Australian Agency for International Development

CAADP Comprehensive Africa Agricultural Development Program

CAAPP Central Africa Agricultural Productivity Program

CBO Community Based Organization

CEMAC Communauté Economique et Monétaire de l'Afrique Centrale

CIDA Canadian International Development Agency

CILSS Comité Inter-Etats pour la Lutte contre la Sécheresse au Sahel

CIRAD Centre de coopération internationale en recherche agronomique pour le développement

COMIFAC Commission des Forêts D'Afrique Centrale

CORAF/WECARD Conseil Ouest et Centre Africain pour la Recherche et le Développement Agricoles/West and Central African Council for Agricultural Research for Development

CSIRO Commonwealth Scientific and Industrial Research Organization, Australia

CTA Technical Centre for Agricultural and Rural Cooperation

DFID Department for International Development (UK)

DONATA Dissemination of New Agricultural Technologies in Africa

EC European Commission

ECCAS Economic Community of Central African States

ECOWAS Economic Community of West African States

FAAP Framework for Agricultural Research in Africa

FARA Forum for Agricultural Research in Africa

GCARD Global Conference on Agricultural Research for Development

GFAR Global Forum for Agricultural Research

GL Groupement Lakhalkaney

GM Genetically modified

IAR4D Integrated Agricultural Research for Development

IARC International Agricultural Research Centers

ICRAF International Center for Research in Agro-Forestry

Acronyms & Abbreviations

ICRISAT International Crops research Institute for Semi-Arid Tropics

IER Institut d'Economie Rurale, Mali

IFDC International Fertilizer Development Center

IITA International Institute for Tropical Agriculture

ILRI International Livestock Research Institute

INERA Institut de l'environnement et de recherches agricoles, Burkina Faso

INRAB Institut National des Recherches Agricoles du Bénin

INRAN Institut national de la recherche agronomique du Niger

INSAH Institut du Sahel

IRAD l'Institut de Recherche Agricole pour le Développement

IRD L'Institut de recherche pour le développement

IRSAT Institut de Recherche en Sciences Appliquées et Technologies

ISRA Institut Sénégalais de Recherches Agricoles

ITRAD Institut Tchadien de Recherche Agronomique pour le Développement

KKM PLS Kano-Katsina-Maradi Pilot Learning Site

MDTF Multi-Donor Trust Fund

MTOP Medium-Term Operational Plan

NAIP National Agricultural Investment Plan

NARS National Agricultural Research System

NASTA National Seed Trade Associations

NEPAD New Partnership for Africa's Development

NGO Non-Governmental Organization

NPCA NEPAD Planning and Coordinating Agency

NTFP Non-Timber Forest Products

OP Operational Plan

RAILS Regional Agricultural Information and Learning Systems of FARA

REC Regional Economic Community

ROPPA Réseau des organisations paysannes et de producteurs de l'Afrique de l'Ouest

RYMV Rice Yellow Mottle Virus

SABIMA Strengthening Capacity for Safe Biotechnology Management in Sub-Saharan Africa

SCARDA Strengthening Capacity for Agricultural Research and Development in Africa

SODEFITEX société de développement et des fibres textiles, Sénégal SOFITEX Société Burkinabé des Fibres Textiles

SRO Sub-regional Research Organization

SSA CP Sub-Saharan Africa Challenge Program

UEMOA Union économique et monétaire ouest-africaine

USAID United States Agency for International Development

WAAPP West Africa Agricultural Productivity Program

WB World Bank

WCA West and Central Africa



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About CORAF/WECARD



CORAF/WECARD is the Conseil Ouest et Centre africain pour la recherche et le développement agricoles/West and Central African Council for Agricultural Research and Development, the apex regional agricultural research coordinating agency for development in West and Central Africa.

CORAF/WECARD membership includes the NARS of 22 countries of the region: Benin, Burkina Faso, Cameroon, Cape Verde, Central African Republic, Congo Côte d'Ivoire, Chad, Democratic Republic of Congo, Gabon, Ghana, Guinea, Guinea Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, The Gambia, and Togo.

CORAF/WECARD is the technical arm of the Regional Economic Communities (ECOWAS, ECCAS, UEMOA and CEMAC) for the implementation of the regional agricultural research policy anchored in the CAADP pillar IV. CORAF/WECARD is one of the three SRO's that was instrumental in founding the Forum for Agricultural Research in Africa (FARA).

CORAF/WECARD Strategic Statements

Vision statement: '... A sustainable reduction in poverty and food insecurity in WCA through an increase in agricultural-led economic growth and sustainable improvement of key aspects of the agricultural research system...'

Mission statement: '...Sustainable improvements to the competitiveness, productivity and markets of the agri- cultural system in West and Central Africa by meeting the key demands of the sub-regional research system as expressed by target groups...>>

Specific objective: 'Broad-based agricultural productivity, competitiveness and markets sustainably improved for targeted groups in West and Central Africa.'

CORAF/WECARD Four Result Areas

1. Appropriate technologies and innovations developed
2. Strategic decision-making options for policy, institutions and markets developed
3. Sub-regional agricultural research system strengthened and coordinated
4. Demand for agricultural knowledge from targeted clients facilitated and met

CORAF/WECARD Donor Partners

World Bank, European Commission (EC), the Governments of the United Kingdom, United States of America, Australia, and Canada.