



European
Commission

Delivering on the Joint **Africa-EU** Strategy through Research and Innovation

*Research and
Innovation*

Delivering on the Joint Africa-EU Strategy through Research and Innovation

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FOREWORD



Carlos Moedas

Delivering on the Joint Africa-EU Strategy through Research and Innovation

Africa and the EU enjoy a long-standing partnership touching upon key fields such as peace and security, human rights, trade and socio-economic development. Science, technology and innovation (STI) play a fundamental role in our relations and are cross-cutting topics in the Joint Africa-EU Strategy. STI investments contribute directly to the attainment of all socio-economic development objectives – including the United Nations Sustainable Development Goal targets – and are vital for promoting growth and employment, improving competitiveness, and identifying and addressing pressing global societal challenges.

All projects presented in this publication have been funded since 2010 through the EU Framework Programmes for Research and Innovation. They showcase how our joint scientific efforts can produce ground-breaking results with a positive impact on local development and economic growth. All these projects cover important research areas such as water, food security, sustainable energy, climate change and health. In addition, they showcase how science can support policy-making since it gives rise to the first concerted EU-Africa effort, deepening research cooperation in thematic priority areas and leading to the conception of the EU-Africa Research and Innovation Partnership on Food and Nutrition Security and Sustainable Agriculture. Today, just one year after the adoption of this initiative, Africa and Europe are working towards a second partnership which will have a special focus on climate change and sustainable energy.

Research and innovation will continue to play a catalytic role in our overall relations with Africa. Against this background, the EU remains firmly committed to fostering exchanges and good practices among African and European researchers and innovators with a view to building knowledge-based societies and economies across both continents.

Carlos Moedas
EU Commissioner for Research,
Science and Innovation

SUSTAINABLE INTENSIFICATION

EAU4Food

The EAU4Food project investigated new methods of managing soil and water to increase crop yields and incomes in African farms. Together, smallholders and researchers developed low-cost innovations that improve irrigation, planting, plant protection and soil quality, and minimise pollution of fresh water.

These aimed to meet needs identified by local farmers, such as calls for a more efficient use of natural resources, more productivity from diverse crops – tomatoes, onions and rice, for example – and greater access to markets. By addressing these issues, the project aimed to develop solutions that could be applied to some of the major challenges in African agriculture.



Innovations were developed and trialled at study sites in five countries. Many increased yields dramatically, potentially boosting regional development and food security. The study sites represent a cross-section of African regions – South Africa and Mozambique (Southern Africa), Ethiopia (East Africa), Tunisia (Northern Africa), and Mali (West Africa).

Data from the trials have helped project researchers draw up guidelines on the most productive soil and water-management techniques in different environments and social structures. The project's inclusive process was a strong part of its success. This process could now be scaled up to involve all stakeholders in regional planning, ensuring EAU4Food has a lasting impact on African farming for years to come.

PROJECT NAME: EAU4Food

WEB: http://cordis.europa.eu/project/rcn/99532_en.html

COORDINATOR: Stichting Wageningen Research, Netherlands

TOTAL COST: EUR 4 941 145

EC CONTRIBUTION:
EUR 3 994 856

START/END: July 2011 to June 2015

PARTICIPANTS:
Netherlands, Mali, Zambia, South Africa, Tunisia, Ethiopia, Sri Lanka, France, United Kingdom, Spain, Mozambique

●●● WATER AND FOOD SECURITY

ACCESS TO SUFFICIENT, SAFE AND NUTRITIOUS FOOD IS A RIGHT FOR ALL. HOWEVER, WATER AND FOOD SECURITY CHALLENGES STILL EXIST IN AFRICA AND EUROPE. SUPPORTING JOINT EU-AFRICA AGRICULTURAL RESEARCH IS KEY TO UPGRADING WATER TECHNOLOGIES USED IN AGRICULTURE, IMPROVING SAFETY AND QUALITY OF FOOD AND ENHANCING FOOD VALUE CHAINS. INNOVATIVE AGRICULTURAL SYSTEMS CONTRIBUTE TO SECURING SUSTAINABLE FOOD PRODUCTION WHILE FOSTERING RURAL DEVELOPMENT.

WAHARA

The WAHARA project aimed to improve African farmers' access to sustainable water supplies for crops. It collected data on traditional and new methods of harvesting water from rain and rivers to develop a computer tool – the Quick Scan Tool – which helps farmers and policy makers choose the best methods for local conditions.

Help to adapt irrigation to local conditions can increase food security and farmers' incomes, while making African farming more resilient. Project researchers built up a database of water-harvesting methods from academic publications and from local farmers in four climates – arid in Tunisia, semi-arid in Burkina Faso, seasonally humid in Ethiopia and sub-humid in Zambia. The four provided researchers with a rich range of methods that could be applied to different climates.

Farmers then tested the approaches, including those from other regions. Typical practices included stone lines that catch rain as it flows down slopes and small pits that hold rain around crops. Results showed that the right water-harvesting techniques for a landscape can more than double crop yields. Many techniques also preserve topsoil, so that crops receive stable levels of nutrients over time.

The Quick Scan Tool combines climate and geographic data with these trial results to suggest water-harvesting methods that can be used for a specific area. Suggestions can change if a region's climate changes.



PROJECT NAME: WAHARA

WEB: www.wahara.eu

COORDINATOR: Stichting Dienst Landbouwkudig Onderzoek, Netherlands

TOTAL COST: EUR 2 619 115

EC CONTRIBUTION:
EUR 1 999 312

START/END: March 2011 to
February 2016

PARTICIPANTS:
Netherlands, United Kingdom, Tunisia,
Burkina Faso, Ethiopia, Zambia

NUTRITION

SUNRAY

Nutritional status in sub-Saharan Africa is still poor and has not improved as it has in other parts of the world. In the SUNRAY project, African researchers and stakeholder organisations proposed priorities for nutrition research to improve the impact on people's health in the region.

Priorities were identified and selected through a series of workshops that included a mix of stakeholder groups. Together, participants recommended: a stronger focus on community-based malnutrition prevention rather than on treatment and technology; promoting changes in people's behaviour; and, finally, food security interventions to improve nutrition. The recommendations could include promoting traditional African foods, food systems and farming models, developing microcredit and social protection



programmes, and strengthening local strategies to cope with volatile food markets and climate change.

Participants also said that there was a need for more African influence on nutrition research. They called on African governments to give the topic higher priority, on funding agencies to focus more on local people's priorities, and for scientists to have more access to data and training.

From these conclusions, the project produced a roadmap for better-targeted nutrition research in sub-Saharan Africa. It has also started a research network to increase African capacity to respond to challenges and leading to greater inter-African collaboration on nutrition research, empowering scientists to develop a research agenda that meets African needs.

PROJECT NAME: SUNRAY

WEB: sunrayafrica.co.za

COORDINATOR: Prins Leopold Instituut voor Tropische Geneeskunde, Belgium

TOTAL COST: EUR 1 088 201

EC CONTRIBUTION:
EUR 968 463

START/END: January 2011 to
December 2012

PARTICIPANTS:
Belgium, Sweden, Netherlands, South Africa, Tanzania, Benin, France, Uganda, Spain, United Kingdom

GRATITUDE

The GRATITUDE project found new ways to reduce post-harvest losses and extract more value from cassava and yams – basic foods in Africa. Its innovative measures increase storage time, create value-added processed products and return processing waste to the wider agricultural system.

To identify where opportunities for nutrition or income were being overlooked, researchers assessed the value chain of cassava and yam harvesting in Ghana and Nigeria, as well as Thailand and Vietnam. It then identified the size of these losses and their causes.

Armed with this information, researchers tested innovative measures that could reduce the losses. In one test, yams were dipped in extracts from local plants to limit sprouting, to make more of the crop edible for longer. Other innovations devised food products from cassava and yams – such as gluten-free flour or high-fibre snacks – along with safety and quality management systems for bringing these to market. A third group of measures found uses for the stalks and peelings left as waste after farming, for example as animal feed or compost for mushroom farming.

These measures make it possible to obtain more food value from the crops, either directly or indirectly. They could also dramatically increase the incomes they can generate, encouraging farmers to grow more food while benefiting the economy.



PROJECT NAME: GRATITUDE

WEB: fp7-gratitude.eu

COORDINATOR: University of Greenwich, United Kingdom

TOTAL COST: EUR 3 753 138

EC CONTRIBUTION:
EUR 2 850 413

START/END: January 2012 to March 2015

PARTICIPANTS:
United Kingdom, Netherlands, Portugal, Nigeria, Ghana, Thailand, Vietnam

TRADE

AFTER

In the AFTER project, researchers developed innovative processing for 10 traditional African foods to improve their safety and quality and adapt them to foreign tastes. They also surveyed consumers to assess the potential market for these foods in Europe.

Products were chosen from three food groups – fermented cereals, fermented salted fish or meat, and vegetables or fruit. The project team investigated how African and European consumers who are unfamiliar with these foods perceive their sensory quality. From this feedback, it proposed processing improvements that could allow producers to sell the foods to new customers.

Project partners then tested the enhanced products for their safety and nutritional quality, and assessed consumer acceptance and requirements for entering EU markets. Marketable lines are now being developed, and some could one day be on European shelves. For example, a type of Senegalese smoked catfish, 'kong', is being prepared by manufacturers for export to Europe, while products made from hibiscus a sweet-flavoured flower have also done well in tests with Europeans.

Information from production trials for the new foods is being shared with other food businesses. The project team expects its success to inspire



further collaborations on other African foods, to open fresh markets for producers and bring novel tastes to consumers.

PROJECT NAME: AFTER

WEB: www.after-fp7.eu

COORDINATOR: Centre de Coopération Internationale en Recherche Agronomique pour le Développement - C.I.R.A.D. EPIC, France

TOTAL COST: EUR 3 876 874

EC CONTRIBUTION:
EUR 2 929 585

START/END: September 2010 to November 2014

PARTICIPANTS:

France, Benin, South Africa, Egypt, Madagascar, Senegal, Cameroon, Portugal, United Kingdom, Italy, Ghana

MYCORED

Mycotoxins are microscopic fungi that can cause illness or death. The MYCORED project developed affordable procedures and technologies that reduce mycotoxin contamination, to protect consumers and increase exports for farmers and processing businesses.

Many countries have strict limits on the amounts of mycotoxins that are permitted in imported food or animal feed. When mycotoxins exceed these levels, the impacted goods are blocked at borders. MYCORED focused on reducing contamination in wheat, maize, grape, nuts and dried fruit – all perishable crops where export delays cause losses for growers, manufacturers and exporters.

Researchers identified points in the food chains where there was a risk of contamination, both before and after harvesting. They then designed measures that cut down these risks. Pre-harvest

innovations focused on improving plant resistance and fungicide use post-harvest ones ranged from new storage practices to food-processing technologies, including new methods of detecting mycotoxins.

These measures improve the safety and quality of foods, making the export chain more reliable and benefiting consumers in producer countries and abroad. They also reduce opportunities for the fungi to spread through accidental contamination. Awareness and knowledge about mycotoxins has increased, thanks to the project, which can reduce their risks to trade and human health worldwide.

PROJECT NAME: MYCORED

WEB: www.mycored.eu

COORDINATOR: Consiglio Nazionale delle Ricerche, Italy

TOTAL COST: EUR 7 372 847

EC CONTRIBUTION:
EUR 5 769 956

START/END: April 2009 to September 2013

PARTICIPANTS:
Italy, United Kingdom, Austria, Denmark, Germany, Netherlands, Hungary, France, Turkey, Russia, Egypt, Nigeria, Mexico, Argentina, Spain, Belgium, South Africa





437 PROJECTS

WITH AFRICAN PARTNERS

1119 AFRICAN PARTNERS

AFRICAN MARIE-SKŁODOWSKA
CURIE RESEARCH FELLOWS: **2036**

EUR 2 BILLION

COST OF PROJECTS

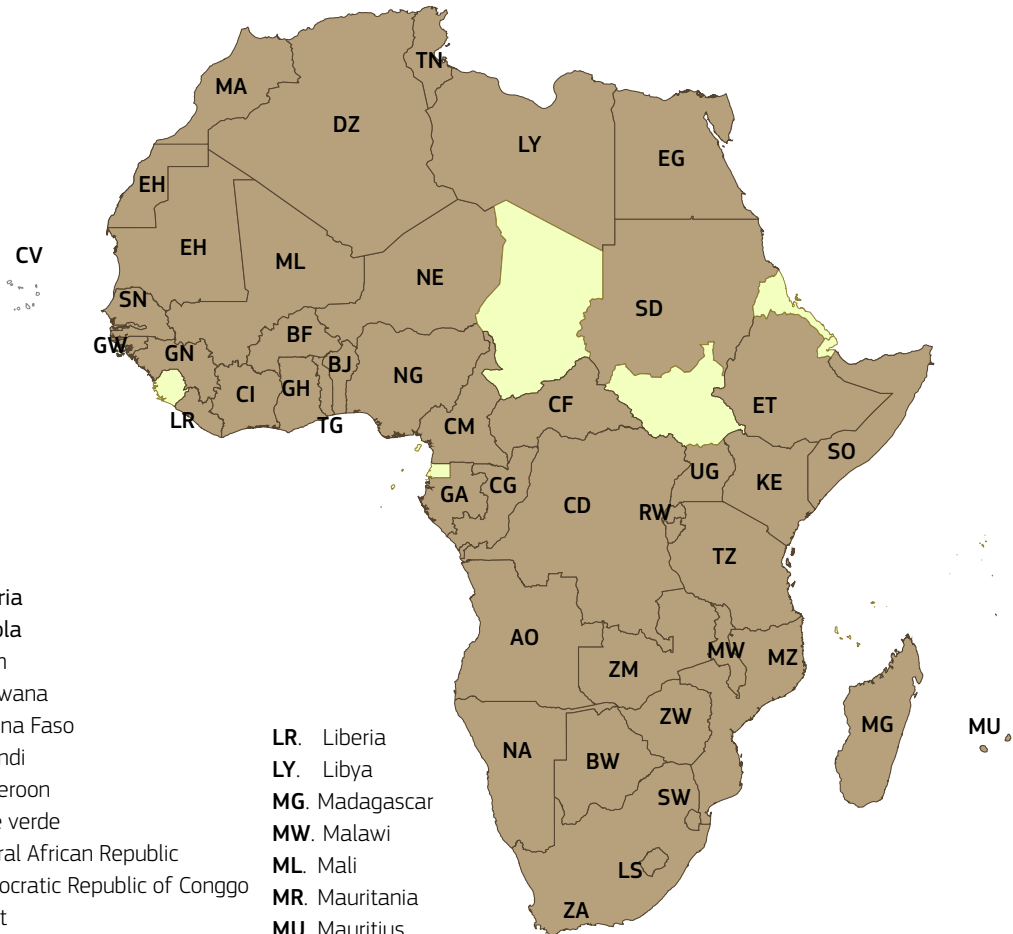
EUR 1.6 BILLION

EU CONTRIBUTION TO PROJECTS

EUR 159 MILLION

EU CONTRIBUTION
TO AFRICAN PARTNERS

INTERNATIONAL R&I COOPERATION WITH AFRICA (2010-2017)



- | | | |
|--|-----------------------------------|----------------------------|
| DZ . Algeria | LR . Liberia | TZ . Tanzania |
| AO . Angola | LY . Libya | TG . Togo |
| BJ . Benin | MG . Madagascar | TN . Tunisia |
| BW . Botswana | MW . Malawi | UG . Uganda |
| BF . Burkina Faso | ML . Mali | EH . Western Sahara |
| BI . Burundi | MR . Mauritania | ZM . Zambia |
| CM . Cameroon | NE . Niger | ZW . Zimbabwe |
| CV . Cape verde | NG . Nigeria | |
| CF . Central African Republic | CG . Republic of the Congo | |
| CD . Democratic Republic of Congo | RW . Rwanda | |
| EG . Egypt | NA . Namibia | |
| ET . Ethiopia | BW . Botswana | |
| GA . Gabon | LS . Lesotho | |
| GM . Gambia | ZA . South Africa | |
| GH . Ghana | | |
| GN . Guinea | | |
| GW . Guinea-Bissau | | |
| CI . Ivory Coast | | |
| KE . Kenya | | |
| LS . Lesotho | | |

CROSS-CUTTING

INSARD



Smallholders produce most of Africa's food, and constantly innovate to be more productive. Even so, they are not often represented in government or international agricultural research. As a result, many solutions are not suitable for smallholders – they might require supplies that these farmers cannot obtain, loans they cannot finance or even soils or geography that are different to those on their farms.

The INSARD project brought together smallholder farmers, scientists and policymakers to identify priority topics for agricultural research, match research better to smallholders' needs and learn from farmers' own innovations and research.

Doing research with farmers, not for farmers, can target research resources to more useful outcomes. INSARD's researchers developed a consultation

process in which smallholders and researchers jointly identified concerns and possible solutions. Here, smallholders asked researchers to focus on three priorities: optimise local seed systems, develop low-input soil fertility improvements, and propose solutions to land-tenure issues.

INSARD showed that talking to these stakeholders can improve research. It also strengthened links in the network of related civil society organisations so that they can better represent smallholders at national, EU and international levels. INSARD has helped give smallholders a voice in agricultural research, which if nurtured can strengthen the bed-rock of African food production.

PROJECT NAME: INSARD

WEB: www.repaoc.org/en/image-gallery/278-insard-seeing-ard-differently

COORDINATOR: Stichting ETC, Netherlands

TOTAL COST: EUR 603 562

EC CONTRIBUTION: EUR 498 330

START/END: January 2011 to December 2013

PARTICIPANTS: Netherlands, Tanzania, France, Zambia, United Kingdom, Senegal

JOLISAA

JOLISAA improved researchers' understanding of the process of innovation which occurs on smallholder farms in Africa. Better knowledge about this process can help policymakers and other stakeholders – such as development agencies – optimise programmes to increase smallholders' incomes and wider food security.

The research was based on case studies to give a snapshot of a cross-section of innovation drivers and processes. Cases ranged from local to regional initiatives, from planned to bottom-up processes and from natural resource management to agribusiness. From over 50 proposed cases, researchers selected 13 examples of African agricultural innovation – in Kenya, South Africa and Benin – for an in-depth assessment. Here, they interviewed stakeholders to discover why and how they had innovated and what changes would help them innovate more easily.

The team found that local innovation evolves rather than being planned and that the best approaches are flexible, open-ended, and engage long term with local stakeholders. They also found that the drivers of innovation vary with the kind of stakeholder. While external stakeholders are often motivated to innovate by the possibility of developing a technical solution – and the availability of funds – smallholders innovate to overcome barriers to accessing markets.

These insights can help project designers better support local innovation, empowering farmers to improve their lives and those of others.



PROJECT NAME: JOLISAA

WEB: www.jolisaa.net

COORDINATOR: Centre de Coopération Internationale en Recherche Agronomique pour le Développement - C.I.R.A.D. EPIC, France

TOTAL COST: EUR 1 608 990

EC CONTRIBUTION:
EUR 999 657

START/END: February 2010 to July 2013

PARTICIPANTS:
France, Netherlands, South Africa, Kenya, Benin

CLIMATE SERVICES

DEWFORA



The DEWFORA project has developed an early-warning system that provides simplified information on a region's drought risk for each season. It also suggests how specific groups – such as farmers or water-management agencies – can adapt to predicted water shortages. These accessible drought warnings can help limit vulnerability to this growing impact of climate change.

Recurring water shortages in Africa endanger local ecosystems and threaten agriculture-based communities. As climate change continues, forecasters expect droughts to become more frequent and severe. Yet at-risk areas often focus more on drought relief than on preparing for drought in advance.

The groups most at risk – such as farmers – need key information that allows them to act ahead of a drought, for example to plant crops that will need less water than usual. Typical medium- and long-term forecasts are too complex and weather-focused for this use.

In DEWFORA's system, an online map-based tool monitors and forecasts water availability for the whole of Africa and links these predictions to local geography, social structures and economies. Local experts can then interpret the forecasts in terms of their impacts on people and give advice on action to take, for a healthier, more secure and prosperous future for communities living with drought.

PROJECT NAME: DEWFORA

WEB: www.dewfora.net

COORDINATOR: Stichting Deltares,
Netherlands

TOTAL COST: EUR 4 403 104

EC CONTRIBUTION:
EUR 3 490 000

START/END: January 2011 to
December 2013

PARTICIPANTS:
Netherlands, France, United Kingdom,
Belgium, Germany, Spain, Portugal,
Egypt, Sudan, Kenya, Mozambique,
South Africa, Morocco, Botswana

●●● SUSTAINABLE ENERGY AND CLIMATE CHANGE

PROTECTION OF THE ENVIRONMENT IS A PREREQUISITE FOR SUSTAINABLE DEVELOPMENT IN BOTH AFRICA AND EUROPE. EU-FUNDED PROJECTS FOSTER RESEARCH ON CLIMATE SERVICES WITH THE AIM OF IMPROVING RESILIENCE TO CLIMATE CHANGE. RESEARCH AND INNOVATION COOPERATION ON RENEWABLE ENERGY AND ENERGY EFFICIENCY ALSO ADVANCES THE EFFORTS OF BOTH CONTINENTS IN THE FIGHT AGAINST GLOBAL WARMING WHILE BUILDING CLIMATE-RESILIENT AND LOW-CARBON SOCIETIES.

EUPORIAS



While climatic conditions are difficult to forecast, it is possible to predict their impacts by studying the most relevant parameters for these. In the EUPORIAS project, researchers developed various prototype climate services for seasonal predictions, tailored to meet specific user needs.

One such innovation was an enhancement to Ethiopia's national food security warning system – LEAP. This system was previously based just on current information from satellite or on-the-ground observations. Consequently, the Ethiopian government only knew that crops had failed in October, at the end of the growing season. This gave them little time to organise food or financial relief in farming communities or beyond.

EUPORIAS' researchers upgraded LEAP to include seasonal rainfall forecasts produced in May. Results show that predictions of humanitarian needs using the forecasts are just as accurate as the previous estimates from harvest-time observations. Developed with the World Food Programme (WFP) and the government of Ethiopia, the upgrade gives the country four months' additional warning to plan its assistance programmes.

That early warning can save lives. It can help avoid the humanitarian disasters so often associated with crop failures, and enables Ethiopia's government to develop more secure strategies for a sustainable society and economy.

PROJECT NAME: EUPORIAS

WEB: www.euporias.eu

COORDINATOR: Met Office, United Kingdom

TOTAL COST: EUR 13 245 139

EC CONTRIBUTION:
EUR 8 976 723

START/END: November 2012 to
January 2017

PARTICIPANTS:
United Kingdom, Portugal, France,
Italy, Switzerland, Spain, Denmark,
Netherlands, Germany, Sweden,
Romania

SUSTAINABLE ENERGY

EUROSUNMED

The project adapted solar technology to North Africa's hot desert climate and power infrastructure. It aims to reduce the region's reliance on gas and oil imports, increase access to clean energy for economic growth and improve its capacity for solar research and a North African solar industry.

Many of the project's technical innovations enhanced photovoltaics (panels that convert sunlight into electricity) and concentrated solar power (mirrors or lenses that direct sunlight to a collector to drive generators). Others improved energy-storage systems or investigated innovative energy-storage solutions, such as rocks, molten salt or industrial waste. In term of grids, the project proposed standardised codes and strategies to improve power balancing and storage.



Training was another important part of the project. Project partners held events to share know-how within the region, on both technical and management skills. And for graduates who want to pursue a career in the solar industry, the project provided in-the-field experience.

As such, it created opportunities for business partners in the project consortium to become more competitive. But European solar know-how was also enhanced and EUROSUNMED strengthened European-North African links on solar research, so that the project's fruitful collaborations to spread low-carbon energy can continue on both sides of the Mediterranean.

PROJECT NAME: EUROSUNMED

WEB: www.eurosunmed.eu

COORDINATOR: Centre National de la Recherche Scientifique CNRS, France

TOTAL COST: EUR 6 301 821

EC CONTRIBUTION:
EUR 5 261 726

START/END: September 2013 to August 2017

PARTICIPANTS:
France, Morocco, Norway, Spain, Belgium, Egypt, Italy

ENEXAL



The primary aluminium production industry is the world's largest industrial consumer of energy and one of the most CO₂-intensive industries. It also generates enormous quantities of waste, which takes energy out of the aluminium production process. At the same time, aluminium and the products made from it are vitally important to economies and societies around the world.

In ENEXAL, African, European and Israeli experts developed novel technologies and business strategies that can reduce the industry's environmental impact. Their innovations save energy, reduce greenhouse gas emissions and turn solid hazardous waste into useful products, making the industry more sustainable, competitive and viable worldwide.

Two novel processing methods cut energy use and greenhouse gas emissions at the alumina extraction stage. One of these uses a novel solar furnace for maximum energy savings. At the other end of the process, business strategies and other technologies convert processing waste – known as 'red mud' – into valuable products. This also reduces waste of the overall energy used to make aluminium.

Combined, these technologies demonstrate a new primary aluminium production system that is smarter and more environmentally sustainable. Optimised, this could make the aluminium industry a leader in energy-efficient technologies and products in Africa and elsewhere.

PROJECT NAME: ENEXAL

WEB: www.labmet.ntua.gr/enexal

COORDINATOR: Alouminion tis Ellados Viomichaniki kai Emporiki Anonymos Etaireia VEAE, Greece

TOTAL COST: EUR 8 471 072

EC CONTRIBUTION:
EUR 4 948 964

START/END: May 2010 to May 2014

PARTICIPANTS:
Germany, Greece, Switzerland, Israel, Serbia, Italy, South Africa

AVECNET

Many mosquito species have become or are becoming resistant to insecticides, limiting anti-malaria programmes. AVECNET deepened the knowledge on the causes of resistance and developed new tools (e.g. insecticides combinations, repellents, insecticide delivery methods, etc.) to target the resistant species.

AVECNET innovations that help develop better prevention methods included a new type of trial hut for testing insecticide indoor spraying and new insecticide-resistant mosquito strains for lab-screening active ingredients (both now adopted by the World Health Organization). Others were a mosquito trap that protects people from mosquito bites and a video-camera system that can track mosquito movements and helps to know mosquito behaviour in the dark.



These new tools have led to a breakthrough – a new type of insecticide treated bednet that has been patented. Researchers also studied and developed a repellent against outdoor mosquitos, anti-mosquito-larvae poisons as well as new ways to reduce or optimise the use of insecticides in households to better safeguard human health.

Stakeholder input informed some of the proposed strategies. People in local communities were involved by giving them disposable cameras to record data, while stakeholders' consultations proposed ways to implement new tools more quickly, for example by producing these malaria control tools locally.

AVECNET has strengthened African research capacity through workshops and training, and the results have been widely shared, helping to advance the global fight against malaria.

PROJECT NAME: AVECNET

WEB: www.avecnet.eu

COORDINATOR: Liverpool School of Tropical Medicine, United Kingdom

TOTAL COST: EUR 15 400 185

EC CONTRIBUTION:
EUR 11 999 989

START/END: February 2011 to December 2016

PARTICIPANTS:
United Kingdom, Tanzania, Switzerland, Greece, Italy, Burkina Faso, Malawi, France, Kenya

●●● BETTER HEALTH FOR AFRICA

INFECTIOUS DISEASES AFFECT AN IMPORTANT PART OF THE POPULATION, PARTICULARLY IN LOW- AND MIDDLE-INCOME COUNTRIES. THESE DISEASES ARE POTENTIAL THREATS TO EUROPEAN PUBLIC HEALTH AS WELL. THE EU SUPPORTS RESEARCH AND INNOVATION COOPERATION ACROSS EUROPE AND AFRICA TO ENHANCE PREVENTION OF, PREPAREDNESS FOR AND CONTROL OF INFECTIOUS DISEASES AND EMERGING EPIDEMICS.

HEALTHY FUTURES

HEALTHY FUTURES developed an interactive online atlas that maps the risk in Eastern Africa of three diseases carried by species found around water: malaria and Rift Valley fever, transmitted by mosquitos, and schistosomiasis, caused by worms in freshwater snails. It helps policymakers predict the impacts of climate change and other factors on these diseases, to better protect public health.

Developed in consultation with decision-makers in Eastern Africa, the atlas uses data from various sources, such as Earth observation and environmental measurements. The data is used to assess, monitor and model conditions in Eastern Africa as they change. This information is processed through a new generation of dynamic models for the three diseases to help predict where they will occur.

Response to the atlas has been positive. It has an option to zoom in on areas to see how risk varies within a region, while its long-term outlook and decision-support tools facilitate response planning. As part of its approach, HEALTHY FUTURES set up innovative management and governance tools for disease management, working with local partners, and provided training to strengthen Eastern Africa's disease research capacity.

The atlas demonstrates the links between the environment and human health, and that caring for one helps to protect the other.



PROJECT NAME: HEALTHY FUTURES

WEB: www.healthyfutures.eu

COORDINATOR: Trinity College Dublin, Ireland

TOTAL COST: EUR 4 161 391

EC CONTRIBUTION:
EUR 3 377 998

START/END: January 2011 to December 2014

PARTICIPANTS:
Ireland, Rwanda, France, Austria, Sweden, Kenya, United Kingdom, Uganda, South Africa, Singapore

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Research and innovation will continue to play a catalytic role in our overall relations with Africa. The EU will remain committed to fostering exchanges and good practices among African and European researchers and innovators with a view to building knowledge-based societies and economies across both continents.

Research and Innovation policy

